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Martin Marietta Environmental Systems

1984 YEAR CLASS REPORT
FOR THE HUDSON RIVER ESTUARY
MONITORING PROGRAM

VOLUME II - APPENDIX TABLES

Prepared for

Consolidated Edison Company
of New York, Inc.
4 Irving Place
New York, New York 10003

Jointly financed by

Central Hudson Gas and Electric
Corporation
Consolidated Edison Company of
New York, Inc.
New York Power Authority
Niagara Mohawk Power Corporation
Orange and Rockland Utilities, Inc.

MARTIN MARIETTA

May 1986

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Prepared by
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9200 Rumsey Road
Columbia, Maryland 21045

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APPENDIX A

WATER QUALITY

Table A-1. Mean water temperature (°C) for each region and week of the Longitudinal River/Fall Shoals Water Quality Survey in 1984

WEEK BEGINNING MONDAY	REGIONS											
	VK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL
07MAY84	13.1	13.7	13.6	14.3	13.9	14.0	14.0	13.8	13.0	12.1	12.1	12.1
14MAY84	13.2	13.8	14.5	14.3	13.3	13.0	13.1	13.0	13.0	13.0	12.2	11.9
21MAY84	13.6	15.2	15.9	15.3	15.7	15.5	14.1	14.0	14.3	14.8	14.6	14.7
28MAY84	16.5	16.5	15.7	14.7	13.9	13.6	13.5	13.1	13.0	12.9	12.7	12.3
04JUN84	16.1	16.0	15.7	15.3	15.3	15.0	14.5	14.5	14.8	15.0	14.9	15.0
11JUN84	18.7	20.5	19.8	18.7	18.8	19.1	18.8	20.3	21.2	21.5	22.7	23.6
18JUN84	19.8	20.5	20.2	20.8	20.3	20.7	20.8	21.8	22.0	22.3	22.9	23.0
25JUN84	20.3	21.3	21.9	22.4	21.1	21.3	22.9	23.5	23.5	23.1	23.5	23.9
02JUL84	22.7	23.1	23.3	23.0	22.7	23.3	24.1	24.1	24.2	24.6	25.0	25.2
09JUL84	22.7	23.4	23.3	23.8	23.3	23.6	24.1	23.4	23.5	23.2	23.0	22.5
16JUL84	24.2	25.4	25.6	25.5	25.0	25.0	24.5	24.8	25.0	25.0	25.0	25.2
30JUL84	23.0	23.2	23.2	25.0	25.0	25.1	25.3	25.0	25.1	25.2	26.1	25.9
13AUG84	24.5	26.4	27.0	27.2	26.8	27.0	26.9	26.8	26.9	26.7	26.9	27.3
27AUG84	24.3	24.9	25.9	25.9	25.6	25.5	25.6	24.9	24.6	24.1	24.1	24.0
10SEP84	23.4	22.9	24.4	24.6	23.9	23.7	23.4	22.4	22.0	22.0	22.0	21.9
24SEP84	22.3	23.5	20.9	21.7	21.1	21.1	21.3	20.6	19.9	20.1	20.2	20.1
08OCT84	16.6	16.7	18.0	18.5	18.1	18.0	17.4	16.3	16.0	15.8	15.8	15.1
22OCT84	17.1	17.4	17.5	17.6	17.7	17.8	17.4	16.0	15.9	15.9	15.7	16.0

Table A-1. Mean water temperature (°C) for each region and week of the Longitudinal River/Fall Shoals Water Quality Survey in 1984

WEEK BEGINNING MONDAY	YK	REGIONS										
		TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL
07MAY84	13.1	13.7	13.6	14.3	13.7	14.0	13.7	13.6	11.8	10.7	9.5	7.7
14MAY84	13.2	13.8	14.5	14.3	13.1	13.0	12.8	12.8	11.9	11.5	9.6	7.6
21MAY84	13.6	15.2	15.9	15.3	15.5	15.5	13.8	13.8	13.0	13.1	11.4	9.4
28MAY84	16.5	16.5	15.7	14.7	13.8	13.6	13.2	12.9	11.9	11.5	10.0	7.9
04JUN84	16.1	16.0	15.7	15.3	15.2	15.0	14.2	14.3	13.6	13.3	11.7	9.6
11JUN84	18.7	20.5	19.8	18.7	18.5	19.1	18.4	20.1	19.3	19.0	17.8	15.1
18JUN84	19.8	20.5	20.2	20.8	20.1	20.7	20.3	21.5	20.1	19.7	18.0	14.7
25JUN84	20.3	21.3	21.9	22.4	20.9	21.3	22.4	23.2	21.5	20.5	18.5	15.3
02JUL84	22.7	23.1	23.3	23.0	22.5	23.3	23.6	23.8	22.1	21.8	19.6	16.1
09JUL84	22.7	23.4	23.3	23.8	23.0	23.6	23.6	23.1	21.5	20.6	18.1	14.4
16JUL84	24.2	25.4	25.6	25.5	24.6	25.0	24.0	24.4	22.8	22.1	19.6	16.1
30JUL84	23.0	23.2	14.7	25.0	24.6	25.1	24.8	24.7	22.9	22.3	20.5	16.6
13AUG84	24.5	26.4	17.1	27.2	26.5	27.0	26.3	26.5	24.5	23.6	21.1	17.5
27AUG84	24.3	24.9	16.4	25.9	25.3	25.5	25.1	24.5	22.4	21.4	18.9	15.4
10SEP84	23.4	22.9	24.4	24.6	23.6	23.7	23.0	22.1	20.1	19.5	17.3	14.0
24SEP84	22.3	23.5	13.3	21.7	20.8	21.1	20.9	20.3	18.1	17.8	15.8	12.9
08OCT84	16.6	16.7	18.0	18.5	17.8	18.0	17.0	16.1	14.6	14.0	12.4	9.7
22OCT84	17.1	17.4	17.5	17.6	17.5	17.8	17.0	15.8	14.5	14.1	12.4	10.2

Table A-2. Mean water temperature (°C) for each region and week of the Beach Seine Survey in 1984

WEEK BEGINNING MONDAY	REGIONS												
	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	
23JUL84	22.5	25.2	25.4	26.9	25.7	27.4	27.6	25.6	26.2	25.1	26.4	25.1	
06AUG84	26.1	27.1	27.9	27.0	25.5	25.7	25.7	26.0	26.7	26.4	26.4	26.4	
20AUG84	24.1	25.6	25.5	26.6	26.5	25.5	26.1	25.9	26.3	25.8	25.6	25.2	
03SEP84	22.1	21.8	22.4	23.4	23.7	21.3	23.4	22.9	22.3	22.1	22.3	21.3	
17SEP84	20.8	21.7	22.4	23.8	22.6	23.7	21.7	20.6	21.0	19.6	19.4	18.6	
01OCT84	17.5	17.1	18.1	19.9	20.0	17.2	19.0	17.9	17.3	16.6	16.2	16.8	
15OCT84	17.1	17.3	16.9	17.4	17.9	17.4	17.6	16.6	16.3	15.3	16.1	15.2	
29OCT84	17.3	17.3	17.9	18.4	16.6	15.7	16.3	15.6	15.3	14.7	15.5	14.5	

Table A-3. Mean conductivity (mS/cm) for each region and week of the Longitudinal River/Fall Shoals Water Quality Survey in 1984

WEEK BEGINNING MONDAY	REGIONS											
	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL
07MAY84	4.6	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
14MAY84	1.8	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
21MAY84	8.7	2.6	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
28MAY84	6.0	2.0	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
04JUN84	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
11JUN84	12.5	1.4	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2
18JUN84	12.2	4.0	0.3	2.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25JUN84	19.3	10.8	6.2	5.1	2.3	0.7	0.2	0.2	0.2	0.2	0.2	0.2
02JUL84	12.4	8.2	5.4	2.5	0.9	0.3	0.2	0.2	0.2	0.2	0.2	0.2
09JUL84	12.0	3.5	1.1	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
16JUL84	9.5	2.4	0.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
30JUL84	16.6	12.1	10.4	5.8	3.0	1.2	0.3	0.2	0.2	0.2	0.2	0.2
13AUG84	18.6	12.5	10.0	4.4	1.8	0.9	0.2	0.2	0.2	0.2	0.2	0.2
27AUG84	20.0	9.0	8.8	6.7	4.5	2.9	0.5	0.2	0.2	0.2	0.3	0.2
10SEP84	18.8	13.7	9.9	6.8	4.0	1.4	0.2	0.2	0.2	0.2	0.2	0.2
24SEP84	17.6	11.7	9.5	4.6	2.1	0.7	0.2	0.2	0.2	0.2	0.2	0.2
08OCT84	19.3	12.8	8.6	6.6	3.9	1.5	0.2	0.2	0.3	0.3	0.2	0.2
22OCT84	18.3	13.5	10.2	8.6	4.4	2.8	1.0	0.2	0.2	0.2	0.2	0.2

Table A-3. Mean conductivity (mS/cm) for each region and week of the Longitudinal River/Fall Shoals Water Quality Survey in 1984

WEEK BEGINNING MONDAY	REGIONS												
	VK	TZ	CH	IP	WP	CW	PK	HIP	KG	SG	CS	AL	
07MAY84	4.6	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	
14MAY84	1.8	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
21MAY84	8.7	2.6	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	
28MAY84	6.0	2.0	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
04JUN84	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
11JUN84	12.5	1.4	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	
18JUN84	12.2	4.0	0.3	2.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	
25JUN84	19.3	10.8	6.2	5.1	2.3	0.7	0.2	0.2	0.2	0.2	0.2	0.1	
02JUL84	12.4	8.2	5.4	2.5	0.9	0.3	0.2	0.2	0.2	0.2	0.2	0.2	
09JUL84	12.0	3.5	1.1	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	
16JUL84	9.5	2.4	0.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	
30JUL84	16.6	12.1	6.6	5.8	2.9	1.2	0.3	0.2	0.2	0.2	0.1	0.1	
13AUG84	18.6	12.5	6.3	4.4	1.8	0.9	0.2	0.2	0.2	0.2	0.2	0.1	
27AUG84	20.0	9.0	5.6	6.7	4.4	2.9	0.5	0.2	0.2	0.2	0.2	0.2	
10SEP84	18.8	13.7	9.9	6.7	3.9	1.4	0.2	0.2	0.2	0.2	0.2	0.1	
24SEP84	17.6	11.7	6.1	4.6	2.1	0.7	0.2	0.2	0.2	0.2	0.2	0.1	
08OCT84	19.3	12.8	8.2	6.6	3.9	1.5	0.2	0.2	0.3	0.2	0.2	0.1	
22OCT84	18.3	13.5	10.2	8.6	4.4	2.8	0.9	0.2	0.2	0.2	0.2	0.1	

Table A-4. Mean conductivity (mS/cm) for each region and week of the Beach Seine Survey in 1984

WEEK BEGINNING MONDAY	REGIONS											
	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL
23JUL84	13.6	9.0	3.8	4.2	0.9	0.2	0.2	0.2	0.2	0.2	0.2	0.2
06AUG84	15.5	11.3	7.4	5.9	1.9	0.6	0.2	0.2	0.2	0.2	0.2	0.2
20AUG84	14.8	9.6	10.0	8.0	3.6	1.0	0.6	0.2	0.2	0.2	0.2	0.2
03SEP84	15.0	11.5	7.9	6.9	2.1	0.8	0.2	0.2	0.2	0.2	0.2	0.3
17SEP84	13.7	9.3	7.1	4.6	1.9	0.5	0.3	0.2	0.2	0.2	0.2	0.2
01OCT84	9.8	7.8	6.7	5.8	2.0	0.7	0.3	0.2	0.2	0.2	0.2	0.2
15OCT84	13.4	10.3	8.8	8.3	3.6	1.8	0.6	0.2	0.2	0.2	0.2	0.2
29OCT84	13.7	11.1	9.1	7.3	3.3	1.5	0.5	0.2	0.2	0.2	0.2	0.2

Table A-5. Mean salinity (ppt) for each region and week of the Longitudinal River/Fall Shoals Water Quality Survey in 1984

WEEK BEGINNING MONDAY	REGIONS											
	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL
07MAY84	3.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14MAY84	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21MAY84	6.8	1.9	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28MAY84	4.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
04JUN84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11JUN84	8.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18JUN84	8.0	2.4	0.1	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25JUN84	12.8	6.8	3.6	2.9	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
02JUL84	7.5	4.7	3.0	1.3	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0
09JUL84	7.3	1.9	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16JUL84	5.5	1.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30JUL84	10.2	7.2	6.1	3.1	1.5	0.6	0.0	0.0	0.0	0.0	0.0	0.0
13AUG84	11.1	6.9	5.4	2.2	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0
27AUG84	12.1	2.6	4.8	3.5	2.3	1.5	0.2	0.0	0.0	0.0	0.0	0.0
10SEP84	11.6	8.3	5.7	3.7	2.1	0.7	0.0	0.0	0.0	0.0	0.0	0.0
24SEP84	11.0	6.9	5.8	2.7	1.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0
08OCT84	14.0	8.9	5.6	4.2	2.4	0.9	0.0	0.0	0.1	0.1	0.1	0.1
22OCT84	13.0	9.3	6.8	5.6	2.8	1.7	0.5	0.0	0.0	0.0	0.0	0.0

Table A-5. Mean salinity (ppt) for each region and week of the Longitudinal River/Fall Shoals Water Quality Survey in 1984

WEEK BEGINNING MONDAY	YK	TZ	CH	IP	WP	REGIONS								
						CW	PK	HP	KG	SG	CS	AL		
07MAY84	3.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14MAY84	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21MAY84	6.8	1.9	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28MAY84	4.0	1.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
04JUN84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11JUN84	8.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18JUN84	8.0	2.4	0.1	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25JUN84	12.8	6.8	3.6	2.9	1.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
02JUL84	7.5	4.7	3.0	1.3	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
09JUL84	7.3	1.9	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16JUL84	5.5	1.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30JUL84	10.2	7.2	3.9	3.1	1.5	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13AUG84	11.1	6.9	3.4	2.2	0.8	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27AUG84	12.1	2.6	3.1	3.5	2.3	1.5	1.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0
10SEP84	11.6	8.3	5.7	3.7	2.1	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24SEP84	11.0	6.9	3.7	2.7	1.1	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
08OCT84	14.0	8.9	5.6	4.2	2.4	0.7	0.7	0.0	0.0	0.0	0.1	0.1	0.1	0.1
22OCT84	13.0	9.3	6.8	5.6	2.7	1.7	1.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0

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Table A-6. Mean salinity (ppt) for each region and week of the Beach Seine Survey in 1984

WEEK BEGINNING MONDAY	REGIONS											
	YK	IZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL
23JUL84	8.3	4.6	2.0	2.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
06AUG84	8.8	6.1	3.8	3.0	0.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0
20AUG84	8.8	5.3	5.5	4.2	1.8	0.4	0.2	0.0	0.0	0.0	0.0	0.0
03SEP84	9.3	7.0	4.6	3.9	1.1	0.4	0.0	0.0	0.0	0.0	0.0	0.1
17SEP84	8.7	5.6	4.1	2.5	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0
01OCT84	6.6	5.2	4.3	3.5	1.1	0.4	0.1	0.0	0.0	0.0	0.0	0.0
15OCT84	9.2	6.9	5.9	5.5	2.2	1.1	0.2	0.0	0.0	0.0	0.0	0.0
29OCT84	9.4	7.5	5.9	4.6	2.0	0.9	0.2	0.0	0.0	0.0	0.0	0.0

Table A-7. Mean dissolved oxygen (ppm) for each region and week of the Longitudinal River/Fall Shoals Water Quality Survey in 1984

WEEK BEGINNING MONDAY	REGIONS											
	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL
07MAY84	9.8	10.4	11.1	10.1	9.1	9.3	9.0	9.1	9.5	10.2	10.4	10.7
14MAY84	10.2	10.6	10.3	9.6	9.9	9.6	9.3	8.9	9.1	9.5	10.4	11.0
21MAY84	9.1	10.0	9.5	9.8	10.0	9.8	9.4	9.8	9.8	9.9	10.1	9.9
28MAY84	10.1	10.0	10.1	9.9	10.4	10.2	10.7	11.2	11.5	11.7	12.1	12.2
04JUN84	9.3	9.4	9.8	10.1	9.8	10.3	10.6	10.6	10.5	10.5	10.7	10.8
11JUN84	6.8	8.5	8.4	8.6	8.6	8.6	9.0	9.0	9.7	10.2	9.9	8.1
18JUN84	7.0	8.5	9.0	7.6	8.0	8.1	7.9	7.9	7.9	8.2	7.6	7.3
25JUN84	8.1	9.2	8.6	7.8	7.9	7.9	8.0	8.8	8.9	8.9	8.3	7.4
02JUL84	6.9	8.1	7.6	7.6	7.8	8.2	6.9	6.7	6.9	7.7	8.7	7.2
09JUL84	6.5	8.1	7.9	7.8	7.3	7.2	7.6	8.1	7.9	7.8	8.7	8.6
16JUL84	6.0	6.9	7.2	6.9	7.0	7.6	7.3	7.1	7.9	8.9	8.9	8.1
30JUL84	5.8	7.0	6.8	5.9	6.2	7.3	7.8	7.9	8.1	8.0	8.3	7.6
13AUG84	5.1	6.1	5.9	5.6	6.3	6.8	6.5	7.4	7.7	7.7	8.6	6.4
27AUG84	4.9	7.0	7.5	6.5	6.2	6.2	6.2	7.2	8.2	8.7	9.3	7.8
10SEP84	7.0	7.7	8.0	7.0	6.9	7.4	7.0	7.5	8.2	8.6	9.5	8.4
24SEP84	6.9	7.7	7.9	7.4	7.4	7.5	7.4	7.9	8.6	8.7	9.2	8.2
08OCT84	7.2	9.0	8.4	8.0	7.6	8.0	8.1	9.5	10.1	9.4	9.3	9.5
22OCT84	7.6	8.7	8.5	8.1	8.2	8.2	8.3	8.8	8.9	9.6	9.6	8.5

Table A-7. Mean dissolved oxygen (ppm) for each region and week of the Longitudinal River/Fall Shoals Water Quality Survey in 1984

WEEK BEGINNING MONDAY	REGIONS											
	VK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL
07MAY84	9.8	10.4	11.1	9.9	9.0	9.3	8.8	8.9	8.7	9.0	8.2	6.9
14MAY84	10.2	10.6	10.3	9.6	9.7	9.6	9.1	8.8	8.4	8.4	8.1	7.1
21MAY84	9.1	10.0	9.5	9.8	9.9	9.8	9.2	9.7	8.9	8.7	7.9	6.4
28MAY84	10.1	10.0	10.1	9.9	10.3	10.2	10.5	11.1	10.5	10.4	9.5	7.8
04JUN84	9.3	9.4	9.8	10.1	9.6	10.3	10.4	10.4	9.6	9.3	8.4	6.9
11JUN84	6.6	8.5	8.3	8.6	8.5	8.6	8.8	8.9	8.8	9.0	7.8	5.2
18JUN84	7.0	8.5	9.0	7.6	7.9	8.1	7.8	7.8	7.2	7.3	6.0	4.7
25JUN84	8.1	9.2	8.6	7.8	7.8	7.9	7.9	8.7	8.1	7.9	6.5	4.7
02JUL84	6.9	8.1	7.6	7.6	7.7	8.2	6.8	6.6	6.3	6.8	6.9	4.6
09JUL84	6.5	8.1	7.9	7.8	7.2	7.2	7.4	8.0	7.2	6.9	6.9	5.5
16JUL84	6.0	6.9	7.2	6.9	6.9	7.6	7.2	7.0	7.2	7.9	7.0	5.2
30JUL84	5.8	7.0	4.3	5.9	6.1	7.3	7.6	7.8	7.4	7.1	6.5	4.8
13AUG84	5.1	6.1	3.7	5.6	6.3	6.8	6.4	7.3	7.1	6.8	6.7	4.1
27AUG84	4.9	7.0	4.8	6.5	6.1	6.2	6.0	7.1	7.5	7.7	7.3	5.0
10SEP84	7.0	7.7	8.0	7.0	6.9	7.4	6.9	7.4	7.5	7.6	7.4	5.4
24SEP84	6.9	7.7	5.0	7.4	7.3	7.5	7.2	7.8	7.8	7.7	7.2	5.3
08OCT84	7.2	9.0	8.4	8.0	7.5	8.0	8.0	9.4	9.2	8.4	7.3	6.1
22OCT84	7.6	8.7	8.5	8.1	8.1	8.2	8.2	8.7	8.1	8.5	7.5	5.5

Table A-8. Mean dissolved oxygen (ppm) for each region and week of the Beach Seine Survey in 1984

WEEK BEGINNING MONDAY	REGIONS											
	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL
23JUL84	8.6	9.7	8.4	8.4	7.4	8.9	7.2	8.5	9.7	9.6	11.1	7.9
06AUG84	6.2	7.5	9.1	7.5	6.8	7.1	7.4	9.0	12.9	10.8	11.1	9.2
20AUG84	6.8	8.8	8.7	6.9	7.5	8.0	6.8	8.6	9.3	10.3	9.9	7.0
03SEP84	8.2	8.7	9.7	8.7	7.7	8.1	7.1	8.0	9.0	8.8	7.7	6.8
17SEP84	7.7	9.8	9.4	8.3	7.6	10.1	8.1	8.5	9.6	9.6	10.4	8.3
01OCT84	8.8	9.7	10.1	9.4	9.0	8.4	9.3	10.6	12.4	11.1	9.9	9.1
15OCT84	9.7	9.8	9.3	9.4	8.9	8.9	9.6	11.3	11.5	10.3	11.6	9.8
29OCT84	9.2	9.4	8.8	9.1	9.1	10.0	10.3	10.5	11.3	11.3	11.3	10.6

Table A-9. Mean percent oxygen saturation for each region and week of the Longitudinal River/Fall Shoals Water Quality Survey in 1984

WEEK BEGINNING MONDAY	REGIONS											
	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL
07MAY84	95.0	100.2	106.6	98.3	88.1	90.1	86.8	87.6	90.1	94.9	97.3	100.0
14MAY84	98.6	102.1	100.7	94.0	94.2	90.8	88.0	85.0	86.9	90.6	96.8	102.2
21MAY84	91.8	101.4	95.9	98.1	100.7	98.4	91.6	95.5	95.2	97.3	99.3	97.9
28MAY84	106.3	103.5	101.4	97.0	100.9	98.5	102.5	106.7	109.6	111.2	113.9	114.1
04JUN84	94.5	95.2	98.9	100.4	97.5	101.8	103.6	103.8	104.2	104.5	106.3	106.9
11JUN84	77.2	95.4	91.9	92.4	92.0	92.4	96.3	99.8	109.0	115.3	115.3	95.9
18JUN84	80.1	95.5	99.3	85.4	89.1	89.9	88.3	89.8	90.3	94.3	88.7	85.2
25JUN84	97.6	108.7	100.3	92.0	89.5	89.0	93.2	103.4	104.3	104.4	97.2	87.3
02JUL84	83.3	97.2	91.3	89.3	90.9	96.1	82.1	79.5	81.7	92.1	105.7	87.2
09JUL84	78.6	96.6	92.5	91.8	85.1	84.6	90.2	95.1	92.6	90.9	101.9	99.5
16JUL84	74.0	84.4	87.9	84.4	84.7	92.2	87.5	85.1	95.5	107.7	107.4	98.5
30JUL84	72.0	85.1	82.3	72.4	75.3	88.5	94.4	95.6	98.0	97.1	102.5	93.0
13AUG84	65.7	79.7	76.1	70.8	79.6	85.2	81.7	92.4	96.7	96.2	107.2	80.2
27AUG84	63.4	86.0	95.1	82.2	76.6	76.5	75.3	86.5	98.4	103.8	110.9	93.0
10SEP84	88.9	94.8	99.6	86.3	83.3	87.4	82.5	86.2	93.5	98.7	108.3	95.6
24SEP84	85.0	94.8	91.7	85.1	83.6	84.5	83.4	87.6	94.2	95.9	101.0	90.6
08OCT84	81.4	98.3	92.0	87.7	81.8	85.0	85.0	97.0	102.7	95.3	93.8	94.3
22OCT84	86.2	96.7	92.8	87.8	87.3	86.8	87.3	89.7	90.0	97.4	96.6	86.5

Table A-9. Mean percent oxygen saturation for each region and week of the Longitudinal River/Fall Shoals Water Quality Survey in 1984

WEEK BEGINNING MONDAY	YK	REGIONS										
		TP	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL
07MAY84	95.0	100.2	106.6	98.3	87.0	90.1	85.1	86.4	82.2	84.0	76.4	64.0
14MAY84	98.6	102.1	100.7	94.0	93.0	90.8	86.3	83.8	79.3	80.2	76.0	65.4
21MAY84	91.8	101.4	95.9	98.1	99.4	98.4	89.8	94.2	86.9	86.1	78.0	62.7
28MAY84	106.3	103.5	101.4	97.0	99.6	98.5	100.4	105.2	100.1	98.4	89.4	73.0
04JUN84	94.5	95.2	98.9	100.4	96.3	101.8	101.5	102.4	95.1	92.5	83.4	68.4
11JUN84	77.2	95.4	91.9	92.4	90.8	92.4	94.4	98.4	99.5	102.1	90.3	61.4
18JUN84	80.1	95.5	99.3	85.4	87.9	89.9	86.6	88.6	82.4	83.4	69.6	54.5
25JUN84	97.6	108.7	100.3	92.0	88.4	89.0	91.4	102.0	95.2	92.4	76.3	55.9
02JUL84	83.3	97.2	91.3	89.3	89.7	96.1	80.5	78.4	74.6	81.5	83.0	55.8
09JUL84	78.6	96.6	92.5	91.8	84.0	84.6	88.4	93.8	84.5	80.4	80.0	63.7
16JUL84	74.0	84.4	87.9	84.4	83.6	92.2	85.7	83.9	87.2	95.3	84.3	63.0
30JUL84	72.0	85.1	82.3	72.4	74.4	88.5	92.5	94.3	89.5	85.9	80.5	59.5
13AUG84	65.7	79.7	76.1	70.8	78.5	85.2	80.0	91.1	88.3	85.1	84.2	51.4
27AUG84	63.4	86.0	95.1	82.2	75.6	76.5	73.8	85.3	89.8	91.9	87.0	59.5
10SEP84	88.9	94.8	99.6	86.3	82.2	87.4	80.9	85.0	85.3	87.4	85.1	61.2
24SEP84	85.0	94.8	91.7	85.1	82.5	84.5	81.7	86.4	86.0	84.9	79.3	58.0
08OCT84	81.4	98.3	92.0	87.7	80.7	85.0	83.3	95.6	93.7	84.3	73.6	60.4
22OCT84	86.2	96.7	92.8	87.8	86.2	86.8	85.5	88.5	82.1	86.2	75.9	55.4

Table A-10. Mean percent oxygen saturation for each region and week of the Beach Seine Survey in 1984

WEEK BEGINNING MONDAY	REGIONS											
	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL
23JUL84	105.2	121.3	104.3	106.4	91.4	112.6	91.5	103.4	120.3	116.8	137.2	95.9
06AUG84	80.9	98.1	119.1	95.6	83.5	86.7	90.3	111.1	160.5	134.2	138.0	114.3
20AUG84	85.7	110.6	110.6	87.8	93.7	97.5	84.4	105.7	114.9	126.4	121.3	85.7
03SEP84	99.6	103.2	115.8	104.2	91.0	91.7	82.8	93.4	103.3	101.2	89.0	77.0
17SEP84	91.1	116.1	110.7	99.7	88.8	119.9	92.6	94.7	108.0	105.1	113.1	89.1
01OCT84	96.4	104.1	110.0	105.3	100.1	87.1	100.5	111.5	128.7	113.8	100.8	93.4
15OCT84	106.8	107.5	99.8	101.4	94.7	93.6	100.9	116.3	117.0	103.3	117.7	97.7
29OCT84	101.8	102.6	96.2	100.1	94.6	101.4	105.5	105.5	112.8	111.6	113.5	103.6

APPENDIX B

STANDING CROP ESTIMATES

INDEX OF TABLE NUMBERS FOR APPENDIX B

Species	Longitudinal River Survey		Fall Shoals-Beach Seine Survey Young-of-Year/Yearling and Older
	Yolk-sac Larvae	Eggs/ Post Yolk-sac Larvae/ Young-of-year	
striped bass	1-10	11-20	111-118
white perch	21-30	31-40	119-126
American shad	41-50	51-60	127-134
Atlantic tomcod	(a)	61-70	135-142
<u>Alosa sp.</u>	71-80	81-90	(a)
blueback herring	(a)	(a)/91-95	143-150
alewife	(a)	(a)/(b)	151-158
bay anchovy	(a)	96-105	159-166
weakfish	(a)	(a)/(c)	167-170/(c)
white catfish	(a)	(a)/106-110	171-178
spottail shiner	(a)	(a)/(d)	179-186
Atlantic sturgeon	(a)	(a)/(c)	(c)/187-190
shortnose sturgeon	(a)	(a)/(c)	(c)/191-194

- (a) No table is presented because data for these life stages were not analyzed.
- (b) Only one young-of-year alewife was collected in the LRS and this was during river run 9 in the bottom stratum of the Catskill region.
- (c) No fish of this life stage were caught.
- (d) Only two young-of-year spottail shiner were collected in the LRS and this was during river run 11 in the channel of the Catskill region.

INDEX OF DATES BY RIVER RUN FOR 1984

River Run	Longitudinal River	Fall Shoals	Beach Seine
1	---	16 Jul - 19 Jul	24 Jul - 27 Jul
2	08 May - 13 May	30 Jul - 02 Aug	06 Aug - 10 Aug
3	14 May - 18 May	13 Aug - 16 Aug	20 Aug - 25 Aug
4	21 May - 25 May	27 Aug - 30 Aug	04 Sep - 07 Sep
5	30 May - 03 Jun	10 Sep - 14 Sep	17 Sep - 20 Sep
6	04 Jun - 07 Jun	24 Sep - 29 Sep	01 Oct - 05 Oct
7	11 Jun - 15 Jun	08 Oct - 11 Oct	15 Oct - 18 Oct
8	18 Jun - 21 Jun	22 Oct - 25 Oct	29 Oct - 01 Nov
9	25 Jun - 29 Jun	---	---
10	03 Jul - 07 Jul	---	---
11	09 Jul - 12 Jul	---	---

TABLE B-1
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 2. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0 0	NS 0	0 0	0 0	NS 0	0 0
TAPPAN ZEE	0 0	0 0	0 0	0 0	0 0	0 0
CROTON-HAVERSTRAW	0 0	0 0	0 0	0 0	0 0	0 0
INDIAN POINT	3279 880	1482 832	18 11	741 216	0 0	0 0
WEST POINT	7879 1928	1046 389	NS	326 196	14 14	NS
CORNWALL	108 108	414 221	78 44	168 111	44 21	22 12
POUGHKEEPSIE	1648 872	340 146	NS	986 738	67 48	NS
HYDE PARK	479 437	98 70	NS	0 0	0 0	NS
KINGSTON	40 40	137 41	NS	0 0	0 0	NS
SAUGERTIES	115 115	0 0	NS	0 0	0 0	NS
CATSKILL	0 0	0 0	NS	0 0	0 0	NS
ALBANY	NS	0 0	NS	NS	0 0	NS

TABLE B-2 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 3. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0 0	NS	0 0	1723 614	NS	383 383
TAPPAN ZEE	0 0	49 49	7506 3362	9792 3853	1215 410	19886 3131
CROTON-HAVERSTRAW	488 222	13396 6133	9347 5899	1208 358	1295 358	4096 1407
INDIAN POINT	4693 1145	9822 7311	880 466	2547 669	252 185	336 130
WEST POINT	17210 5908	5442 3302	NS	6286 762	163 78	NS
CORNWALL	2933 935	1863 551	33 33	2457 477	375 172	188 70
POUGHKEEPSIE	2115 1320	1068 708	NS	322 180	237 97	NS
HYDE PARK	349 251	0 0	NS	40 40	0 0	NS
KINGSTON	0 0	0 0	NS	0 0	0 0	NS
SAUGERTIES	0 0	0 0	NS	0 0	0 0	NS
CATSKILL	0 0	0 0	NS	0 0	0 0	NS
ALBANY	NS	0 0	NS	NS	0 0	NS

TABLE B-3
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0 0	NS 0	0 0	0 0	NS 0	0 0
TAPPAN ZEE	219 219	0 0	261 131	0 0	0 0	1644 630
CROTON-HAVERSTRAW	0 0	271 159	355 231	663 301	7279 5772	471 221
INDIAN POINT	2061 701	2548 1465	27 27	5224 2174	152 96	835 758
WEST POINT	4463 1420	284 157	NS	2744 782	270 66	NS
CORNWALL	869 424	1661 1157	62 37	314 236	422 128	89 37
POUGHKEEPSIE	3660 1763	1390 803	NS	1212 498	94 33	NS
HYDE PARK	5210 4409	653 371	NS	39 39	0 0	NS
KINGSTON	*52 52	1179 694	NS	0 0	0 0	NS
SAUGERTIES	0 0	0 0	NS	0 0	0 0	NS
CATSKILL	0 0	0 0	NS	0 0	0 0	NS
ALBANY	NS	0 0	NS	NS	0 0	NS

TABLE B-4
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 5. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS				YOLK-SAC LARVAE			
	CHANNEL		SHOAL		CHANNEL		SHOAL	
	BOTTOM	NS	BOTTOM	NS	BOTTOM	NS	BOTTOM	NS
YONKERS	0	NS	0	0	0	NS	0	0
	0	0	0	0	0	0	0	0
TAPPAN ZEE	0	0	0	0	13081	5732	10812	10812
	0	0	0	0	10889	5258	9329	9329
CROTON-HAVERSTRAW	1423	197	734	734	7757	368	2059	2059
	885	197	447	447	6322	305	806	806
INDIAN POINT	0	0	0	0	1049	0	91	91
	0	0	0	0	331	0	91	91
WEST POINT	771	509	NS	NS	298	0	NS	NS
	771	378			101	0		
CORNWALL	0	98	0	0	65	20	0	0
	0	82	0	0	65	20	0	0
POUGHKEEPSIE	0	177	NS	NS	34	0	NS	NS
	0	160			34	0		
HYDE PARK	3190	221	NS	NS	0	0	NS	NS
	1560	108			0	0		
KINGSTON	1782	0	NS	NS	0	0	NS	NS
	945	0			0	0		
SAUGERTIES	1080	3091	NS	NS	137	0	NS	NS
	472	3091			137	0		
CATSKILL	473	68	NS	NS	0	0	NS	NS
	473	68			0	0		
ALBANY	NS	0	NS	NS	NS	0	NS	NS
		0			0	0		

TABLE B-5
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0 0	NS 0	0 0	812 812	NS 0	63 63
TAPPAN ZEE	0 0	0 0	0 0	2243 1923	132 132	5333 3282
CROTON-HAVERSTRAW	58 58	0 0	959 424	763 230	0 0	3683 1319
INDIAN POINT	251 171	0 0	239 239	975 239	81 40	327 301
WEST POINT	6200 3148	48467 34055	NS	4936 2394	0 0	NS
CORNWALL	13299 11161	5129 2787	362 130	1611 406	61 47	159 64
POUGHKEEPSIE	18262 6990	10135 3879	NS	8266 1167	459 210	NS
HYDE PARK	4456 1482	18289 10387	NS	2931 522	120 57	NS
KINGSTON	318 219	34 34	NS	54 54	0 0	NS
SAUGERTIES	1613 440	323 323	NS	0 0	0 0	NS
CATSKILL	0 0	433 433	NS	0 0	0 0	NS
ALBANY	NS	0 0	NS	NS	0 0	NS

TABLE B-6
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 7. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0 0	NS 0	0 0	0 0	NS 0	0 0
TAPPAN ZEE	0 0	NS 0	0 0	586 371	NS 0	271 271
CROTON-HAVERSTRAW	0 0	0 0	0 0	942 316	1377 547	1617 1151
INDIAN POINT	680 361	32 32	0 0	17389 4328	3401 1535	499 306
WEST POINT	11928 3696	7744 2760	NS	47138 7076	20132 7235	NS
CORNWALL	1169 710	1070 698	394 267	85108 28584	9099 3018	1020 344
POUGHKEEPSIE	3031 1720	4128 2292	NS	126692 42766	41143 8051	NS
HYDE PARK	1913 1319	2069 1058	NS	48766 10081	14138 4942	NS
KINGSTON	541 356	2339 1678	NS	39284 34905	5165 3420	NS
SAUGERTIES	5447 632	123 123	NS	6450 371	82 82	NS
CATSKILL	1429 1052	0 0	NS	718 718	530 265	NS
ALBANY	NS	15 15	NS	NS	0 0	NS

TABLE B-7, 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 8. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	0	0	0	588	53	0
	0	0	0	267	53	0
CROTON-HAVERSTRAW	0	43	55	231	170	0
	0	43	55	147	82	0
INDIAN POINT	64	0	0	7105	125	102
	64	0	0	3237	61	62
WEST POINT	1880	90	NS	14941	1751	NS
	1067	90		3003	585	
CORNWALL	27	56	0	3290	1658	76
	27	32	0	1601	765	59
POUGHKEEPSIE	55	0	NS	9648	4992	NS
	55	0		2960	2517	
HYDE PARK	49	200	NS	7471	3307	NS
	49	145		2909	1229	
KINGSTON	0	0	NS	465	503	NS
	0	0		151	259	
SAUGERTIES	0	63	NS	292	251	NS
	0	63		292	251	
CATSKILL	0	0	NS	185	0	NS
	0	0		93	0	
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B B
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 9. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0 0	NS	0	0 0	NS	0
TAPPAN ZEE	0 0	0 0	0 0	0 0	0 0	0 0
CROTON-HAVERSTRAW	0 0	0 0	0 0	0 0	0 0	0 0
INDIAN POINT	0 0	0 0	0 0	252 218	0 0	16 16
WEST POINT	0 0	231 118	NS	1400 296	239 150	NS
CORNWALL	0 0	97 50	19 19	3008 632	1078 533	90 76
POUGHKEEPSIE	324 191	937 605	NS	2925 939	1284 499	NS
HYDE PARK	49 49	90 55	NS	302 167	217 190	NS
KINGSTON	0 0	0 0	NS	113 71	65 65	NS
SAUGERTIES	0 0	0 0	NS	197 197	76 44	NS
CATSKILL	0 0	0 0	NS	0 0	154 154	NS
ALBANY	NS	0 0	NS	NS	0 0	NS

TABLE B-9
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS
 EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 10 . STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT
 SAMPLED.

REGION	EGGS		YOLK-SAC LARVAE			
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0		0	0		
TAPPAN ZEE	0	0	0	0	0	0
	0		0	0	0	0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0		0	0	0	0
INDIAN POINT	0	0	0	0	0	0
	0		0	0	0	0
WEST POINT	49	363	NS	20	0	NS
	34	179		20	0	
CORNWALL	0	0	0	0	13	0
	0		0	0	13	0
POUGHKEEPSIE	0	221	NS	0	0	NS
	0	158		0	0	
HYDE PARK	0	0	NS	0	0	NS
	0			0	0	
KINGSTON	0	0	NS	0	0	NS
	0			0	0	
SAUGERTIES	0	0	NS	0	0	NS
	0			0	0	
CATSKILL	101	0	NS	0	0	NS
	101	0		0	0	
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-10 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 11. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	0	0	0	0	0	0
	0			0		
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0			0		
INDIAN POINT	0	0	0	0	0	0
	0			0		
WEST POINT	0	0	NS	0	0	NS
	0			0		
CORNWALL	0	0	0	0	0	0
	0			0		
POUGHKEEPSIE	0	0	NS	53	26	NS
	0			53	26	
HYDE PARK	0	76	NS	0	0	NS
	0	76		0		
KINGSTON	0	0	NS	0	0	NS
	0			0		
SAUGERTIES	0	0	NS	0	0	NS
	0			0		
CATSKILL	0	0	NS	0	0	NS
	0			0		
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-11 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 2. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0		0	0		0
TAPPAN ZEE	0	0	0	0	0	0
	0	0	0	0	0	0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0	0	0	0	0	0
INDIAN POINT	0	0	0	0	0	0
	0	0	0	0	0	0
WEST POINT	0	0	NS	0	0	NS
	0	0		0	0	
CORNWALL	0	0	0	0	0	0
	0	0	0	0	0	0
POUGHKEEPSIE	0	0	NS	0	0	NS
	0	0		0	0	
HYDE PARK	0	0	NS	0	0	NS
	0	0		0	0	
KINGSTON	0	0	NS	0	0	NS
	0	0		0	0	
SAUGERTIES	0	0	NS	0	0	NS
	0	0		0	0	
CATSKILL	0	0	NS	0	0	NS
	0	0		0	0	
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-12 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS
 POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 3. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0		0	0		0
TAPPAN ZEE	0	0	0	0	0	0
	0		0	0		0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0		0	0		0
INDIAN POINT	0	0	0	0	0	0
	0		0	0		0
WEST POINT	0	0	NS	0	0	NS
	0			0		
CORNWALL	0	0	0	0	0	0
	0		0	0		0
POUGHKEEPSIE	0	0	NS	0	0	NS
	0			0		
HYDE PARK	0	0	NS	0	0	NS
	0			0		
KINGSTON	0	0	NS	0	0	NS
	0			0		
SAUGERTIES	0	0	NS	0	0	NS
	0			0		
CATSKILL	0	0	NS	0	0	NS
	0			0		
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-13 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0	0	0	0	0	0
TAPPAN ZEE	0	0	131	0	0	0
	0	0	131	0	0	0
CROTON-HAVERSTRAW	0	100	0	0	0	0
	0	100	0	0	0	0
INDIAN POINT	37	0	0	0	0	0
	37	0	0	0	0	0
WEST POINT	114	25	NS	0	0	NS
	65	25	0	0	0	0
CORNWALL	0	23	0	0	0	0
	0	23	0	0	0	0
POUGHKEEPSIE	33	0	NS	0	0	NS
	33	0	0	0	0	0
HYDE PARK	0	0	NS	0	0	NS
	0	0	0	0	0	0
KINGSTON	0	0	NS	0	0	NS
	0	0	0	0	0	0
SAUGERTIES	0	0	NS	0	0	NS
	0	0	0	0	0	0
CATSKILL	0	0	NS	0	0	NS
	0	0	0	0	0	0
ALBANY	NS	0	NS	NS	0	NS
	0	0	0	0	0	0

TABLE B-14 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 5. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE		YOUNG-OF-YEAR	
	CHANNEL	SHOAL	CHANNEL	SHOAL
YONKERS	0	0	0	0
	0	0	0	0
TAPPAN ZEE	340	341	0	0
	214	180	0	0
CROTON-HAVERSTRAW	51	0	0	0
	51	0	0	0
INDIAN POINT	0	0	0	0
	0	0	0	0
WEST POINT	0	NS	0	NS
	0	0	0	0
CORNWALL	0	0	0	0
	0	0	0	0
POUGHKEEPSIE	0	NS	0	NS
	0	0	0	0
HYDE PARK	0	NS	0	NS
	0	0	0	0
KINGSTON	0	NS	0	NS
	0	0	0	0
SAUGERTIES	0	NS	0	NS
	0	0	0	0
CATSKILL	0	NS	0	NS
	0	0	0	0
ALBANY	NS	NS	NS	NS
	0	0	0	0

TABLE B-15 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0		0	0		0
TAPPAN ZEE	0	0	140	0	0	0
	0		140	0		0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0		0	0		0
INDIAN POINT	0	0	0	0	0	0
	0		0	0		0
WEST POINT	0	0	NS	0	0	NS
	0			0		
CORNWALL	0	0	0	0	0	0
	0		0	0		0
POUGHKEEPSIE	0	0	NS	0	0	NS
	0			0		
HYDE PARK	0	0	NS	0	0	NS
	0			0		
KINGSTON*	0	0	NS	0	0	NS
	0			0		
SAUGERTIES	0	0	NS	0	0	NS
	0			0		
CATSKILL	0	0	NS	0	0	NS
	0			0		
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-16
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS
 POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 7. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	122 80	NS	0	0 0	NS	0
TAPPAN ZEE	760 300	NS	1093 714	0 0	NS	0 0
CRUTON-HAVERSTRAW	975 209	2823 1397	982 535	0 0	0 0	0 0
INDIAN POINT	1736 541	2128 756	169 87	0 0	0 0	0 0
WEST POINT	2678 403	13084 5120	NS	0 0	0 0	NS
CORNWALL	30832 12578	10649 6742	347 163	0 0	0 0	0 0
POUGHKEEPSIE	15321 7171	13995 6281	NS	0 0	0 0	NS
HYDE PARK	930 351	215 159	NS	0 0	0 0	NS
KINGSTON	53 53	63 63	NS	0 0	0 0	NS
SAUGERTIES	0 0	0 0	NS	0 0	0 0	NS
CATSKILL	0 0	0 0	NS	0 0	0 0	NS
ALBANY	NS	0 0	NS	NS	0 0	NS

TABLE B-17 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 8. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	61 61	NS	0	0 0	NS	0
TAPPAN ZEE	18350 9170	1691 1008	3470 969	0 0	0 0	0 0
CROTON-HAVERSTRAW	15464 1810	11473 5139	8341 2589	0 0	0 0	0 0
INDIAN POINT	236494 52051	30649 12110	16992 5928	0 0	0 0	0 0
WEST POINT	146784 23894	13563 2327	NS	0 0	0 0	NS
CORNWALL	262666 211884	10276 3059	3361 666	0 0	0 0	0 0
POUGHKEEPSIE	92244 22053	21461 8219	NS	0 0	0 0	NS
HYDE PARK	34335 11874	2516 574	NS	0 0	0 0	NS
KINGSTON	1587 923	2623 834	NS	0 0	0 0	NS
SAUGERTIES	1396 844	343 174	NS	0 0	0 0	NS
CATSKILL	0 0	58 58	NS	0 0	0 0	NS
ALBANY	NS	14 14	NS	NS	0 0	NS

TABLE B-18 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 9. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	695	486	734	0	0	0
	597	285	513	0	0	0
CROTON-HAVERSTRAW	5000	1330	3514	0	0	0
	2012	325	2222	0	0	0
INDIAN POINT	206628	13281	4472	0	0	0
	42798	9132	2406	0	0	0
WEST POINT	173601	12991	NS	0	0	NS
	30495	4243		0	0	
CORNWALL	45794	24126	10621	0	0	0
	5030	4341	4596	0	0	0
POUGHKEEPSIE	31091	7930	NS	0	0	NS
	6369	3880		0	0	
HYDE PARK	4052	673	NS	0	0	NS
	480	236		0	0	
KINGSTON	551	2448	NS	0	0	NS
	225	901		0	0	
SAUGERTIES	563	960	NS	0	0	NS
	168	618		0	0	
CATSKILL	1307	310	NS	0	0	NS
	708	155		0	0	
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-19
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS
 POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 10 . . . STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	584	0	NS	0
	0			0		
TAPPAN ZEE	12901	57556	5918	0	0	0
	12138	43737	1504	0	0	0
CROTON-HAVERSTRAW	33605	10439	14103	0	0	0
	12679	1861	3479	0	0	0
INDIAN POINT	28228	9719	1689	0	0	0
	7113	3165	364	0	0	0
WEST POINT	13072	4995	NS	0	0	NS
	1730	1581		0	0	
CORNWALL	9875	5443	6477	0	0	0
	3299	1008	3545	0	0	0
POUGHKEEPSIE	2713	920	NS	0	0	NS
	734	328		0	0	
HYDE PARK	1882	503	NS	0	0	NS
	558	160		0	0	
KINGSTON	1817	2312	NS	0	0	NS
	500	2068		0	0	
SAUGERTIES	568	2346	NS	0	0	NS
	568	1367		0	0	
CATSKILL	0	461	NS	0	0	NS
	0	173		0	0	
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-20
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR STRIPED BASS
 POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 11. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	3434 1245	NS	792	0 0	NS	0
TAPPAN ZEE	2219 528	935 303	2330 541	81 81	0 0	97 97
CROTON-HAVERSTRAW	968 281	333 90	199 140	0 0	0 0	0 0
INDIAN POINT	2624 918	123 38	905 403	474 279	0 0	42 42
WEST POINT	896 245	230 113	NS	120 75	11 11	NS
CORNWALL	863 184	699 159	1289 649	0 0	27 18	223 113
POUGHKEEPSIE	1970 832	875 303	NS	49 49	26 26	NS
HYDE PARK	0 0	227 156	NS	0 0	0 0	NS
KINGSTON	219 110	804 255	NS	0 0	0 0	NS
SAUGERTIES	1138 1	2216 1053	NS	0 0	150 150	NS
CATSKILL	96 96	49 49	NS	0 0	0 0	NS
ALBANY	NS	0 0	NS	NS	0 0	NS

TABLE B-21
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 2. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0 0	NS 0	0 0	0 0	NS 0	0 0
TAPPAN ZEE	0 0	0 0	0 0	167 167	69 69	0 0
CROTON-HAVERSTRAW	0 0	0 0	0 0	35 35	0 0	41 41
INDIAN POINT	149 85	42 19	478 478	588 182	81 30	0 0
WEST POINT	2505 673	697 623	NS	1159 226	76 27	NS
CORNWALL	329 267	4179 3269	66 37	660 373	808 242	386 148
POUGHKEEPSIE	3226 1279	6003 3465	NS	3005 838	2504 551	NS
HYDE PARK	73 73	8052 7030	NS	1198 375	1832 401	NS
KINGSTON	792 463	5331 2874	NS	3753 777	4647 1147	NS
SAUGERTIES	15487 6361	30210 15965	NS	8441 2380	1452 404	NS
CATSKILL	15343 10725	80064 19326	NS	1207 206	1461 489	NS
ALBANY	NS	1224 814	NS	NS	190 70	NS

TABLE B-22
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH EGGS AND VOLK-SAC LARVAE DURING RIVER RUN 3. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			VOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0 0	NS 0	0 0	1246 623	NS 0	0 0
TAPPAN ZEE	0 0	148 148	0 0	874 231	850 771	3597 1437
CROTON-HAVERSTRAW	0 0	0 0	722 457	555 163	705 198	3990 1574
INDIAN POINT	90 42	264 168	0 0	1065 236	211 155	100 47
WEST POINT	516 124	736 358	NS	25456 4788	884 219	NS
CORNWALL	1223 630	10803 3011	60 36	17185 5765	12872 3977	823 218
POUGHKEEPSIE	3637 3339	46913 38495	NS	29883 7838	22796 7489	NS
HYDE PARK	2200 611	38084 21269	NS	20293 4846	7613 2165	NS
KINGSTON	6905 4039	17156 8953	NS	15054 2057	2208 972	NS
SAUGERTIES	14242 14056	33515 26096	NS	6224 3050	1304 946	NS
CATSKILL	397 272	2308 903	NS	2054 610	1323 859	NS
ALBANY	NS	51106 35606	NS	NS	96 57	NS

TABLE B-23 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0		0	0		0
TAPPAN ZEE	0	0	0	553	0	887
	0	0	0	414	0	250
CROTON-HAVERSTRAW	0	0	1189	97	733	923
	0	0	1142	56	281	434
INDIAN POINT	189	5828	0	3259	174	330
	105	5668	0	796	94	223
WEST POINT	5400	8913	NS	7765	830	NS
	1934	1555		2100	351	
CORNWALL	3933	1769	191	3381	3915	1377
	3512	684	135	1037	867	513
POUGHKEEPSIE	24155	80938	NS	23882	5321	NS
	12849	33677		4677	1096	
HYDE PARK	4231	16081	NS	4230	6117	NS
	4155	14943		1878	1967	
KINGSTON	7534	28972	NS	3226	1348	NS
	3559	23969		1004	338	
SAUGERTIES	4987	73575	NS	2035	521	NS
	2878	50375		434	228	
CATSKILL	143398	201392	NS	1738	1178	NS
	65233	80556		763	604	
ALBANY	NS	164	NS	NS	92	NS
		57			21	

TABLE B-24
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 5. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS		YOLK-SAC LARVAE	
	CHANNEL	BOTTOM	CHANNEL	BOTTOM
YONKERS	0	NS	0	NS
	0	0	0	0
TAPPAN ZEE	0	279	5816	394
	0	105	5494	281
CROTON-HAVERSTRAW	51	228	6937	2840
	51	189	1571	2454
INDIAN POINT	236	220	7881	712
	126	96	1291	482
WEST POINT	79	974	6336	1871
	57	371	1243	988
CORNWALL	72	1258	2743	2083
	72	264	1605	300
POUGHKEEPSIE	75	944	670	378
	52	294	218	136
HYDE PARK	2069	7767	777	334
	862	1798	272	144
KINGSTON	2152	10464	171	41
	1187	6821	77	41
SAUGERTIES	0	1832	270	41
	0	789	135	41
CATSKILL	778	2045	99	51
	420	1128	99	51
ALBANY	NS	2782	NS	0
		1951		0

TABLE B-25
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	6240	NS	546
	0		0	2036		32
TAPPAN ZEE	0	0	0	5010	0	4108
	0	0	0	3178	0	1809
CROTON-HAVERSTRAW	0	0	109	2396	187	10603
	0	0	109	325	79	1404
INDIAN POINT	640	0	42	5758	81	803
	479	0	42	944	60	698
WEST POINT	7022	30794	NS	1872	164	NS
	3280	25675		428	58	
CORNWALL	1549	39084	428	879	342	126
	1141	27078	253	421	223	47
POUGHKEEPSIE	4323	131763	NS	2641	1403	NS
	1647	70551		618	408	
HYDE PARK	616	81815	NS	1114	1202	NS
	155	73110		460	422	
KINGSTON	0	17855	NS	958	214	NS
	0	12941		229	128	
SAUGERTIES	21154	243924	NS	1483	463	NS
	10674	96133		855	286	
CATSKILL	303428	415151	NS	1543	596	NS
	65750	113585		190	516	
ALBANY	NS	48302	NS	NS	279	NS
		21044			201	

TABLE B-26
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 7. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	61 61	NS	0	0 0	NS	0
TAPPAN ZEE	0 0	NS	9168 8406	639 547	NS	1583 188
CROTON-HAVERSTRAW	0 0	22 22	4073 4009	1475 807	74 34	786 602
INDIAN POINT	821 664	198 161	0 0	789 129	0 0	0 0
WEST POINT	5733 2052	6019 2459	NS	1636 269	561 261	NS
CORNWALL	379 178	10837 9285	137 66	3802 1605	1291 328	350 32
POUGHKEEPSIE	2073 697	13559 6650	NS	9487 2656	2863 771	NS
HYDE PARK	1525 954	8430 4599	NS	8442 2981	2986 1198	NS
KINGSTON	3199 856	49945 29928	NS	7043 3375	10137 4928	NS
SAUGERTIES	3026 2592	1686378 1437038	NS	17980 1127	690 643	NS
CATSKILL	41270 30907	406642 273592	NS	27306 8151	7136 686	NS
ALBANY	NS	8945 1750	NS	NS	21415 11372	NS

TABLE B-27
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH EGGS AND YOLK-SAC LARVAE DURING RIVER RUN B. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0 0	NS NS	0 0	0 0	NS NS	0 0
TAPPAN ZEE	106 106	1193 1129	345 345	260 173	871 722	769 391
CROTON-HAVERSTRAW	0 0	1362 662	9149 9149	1692 742	1940 838	1685 1002
INDIAN POINT	328 328	2013 1852	356 356	400 164	720 382	25 25
WEST POINT	1192 383	20 20	NS	1007 259	141 53	NS
CORNWALL	146 84	20713 11504	69 69	839 274	1470 721	86 62
POUGHKEEPSIE	466 267	1548 578	NS	1952 557	2097 1387	NS
HYDE PARK	668 614	2735 2371	NS	596 339	5764 3053	NS
KINGSTON	0 0	10810 7857	NS	890 220	1855 899	NS
SAUGERTIES	438 438	10475 9918	NS	3010 233	5554 3005	NS
CATSKILL	278 161	1753 1307	NS	5373 2907	2475 722	NS
ALBANY	NS	14 14	NS	NS	133 34	NS

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TABLE B-28
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 9. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0 0	NS 0	0 0	0 0	NS 0	0 0
TAPPAN ZEE	0 0	0 0	0 0	0 0	0 0	430 430
CROTON-HAVERSTRAW	0 0	0 0	48 48	0 0	179 96	275 171
INDIAN POINT	33 33	249 153	1088 1058	992 493	785 464	60 51
WEST POINT	1286 792	1073 360	NS	536 248	107 45	NS
CORNWALL	75 54	720 449	0 0	730 332	217 116	36 23
POUGHKEEPSIE	110 75	544 218	NS	212 121	250 100	NS
HYDE PARK	195 129	968 688	NS	211 140	324 185	NS
KINGSTON	0 0	34 34	NS	217 106	99 63	NS
SAUGERTIES	0 0	0 0	NS	197 197	38 38	NS
CATSKILL	198 198	3034 1056	NS	0 0	434 243	NS
ALBANY	NS	168 144	NS	NS	201 78	NS

TABLE B-29
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 10. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0 0	NS	0	0 0	NS	0
TAPPAN ZEE	171 171	0 0	0 0	0 0	0 0	0 0
CROTON-HAVERSTRAW	0 0	0 0	0 0	0 0	133 89	0 0
INDIAN POINT	126 97	732 659	0 0	397 187	75 50	0 0
WEST POINT	47 47	919 498	NS	212 82	0 0	NS
CORNWALL	0 0	126 71	0 0	0 0	0 0	0 0
POUGHKEEPSIE	161 161	0 0	NS	0 0	0 0	NS
HYDE PARK	0 0	0 0	NS	0 0	0 0	NS
KINGSTON	0 0	0 0	NS	0 0	0 0	NS
SAUGERTIES	0 0	0 0	NS	0 0	0 0	NS
CATSKILL	0 0	0 0	NS	0 0	0 0	NS
ALBANY	NS	0 0	NS	NS	33 16	NS

TABLE B-30 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 11. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	0	0	0	0	0	0
	0			0		
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0			0		
INDIAN POINT	0	0	0	0	0	0
	0			0		
WEST POINT	0	26	NS	0	0	NS
	0	26		0		
CORNWALL	0	0	0	0	0	0
	0			0		
POUGHKEEPSIE	0	0	NS	0	0	NS
	0			0		
HYDE PARK	0	0	NS	0	0	NS
	0			0		
KINGSTON	0	0	NS	0	0	NS
	0			0		
SAUGERTIES	0	0	NS	0	0	NS
	0			0		
CATSKILL	0	0	NS	398	96	NS
	0			269	48	
ALBANY	NS	0	NS	NS	75	NS
		0			40	

TABLE B-31

1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 2. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0	0	0	0	0	0
TAPPAN ZEE	0	0	0	0	0	0
	0	0	0	0	0	0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0	0	0	0	0	0
INDIAN POINT	56	0	0	0	0	0
	41	0	0	0	0	0
WEST POINT	34	0	NS	0	0	NS
	24	0	0	0	0	0
CORNWALL	110	9	0	0	0	0
	110	9	0	0	0	0
POUGHKEEPSIE	0	0	NS	0	0	NS
	0	0	0	0	0	0
HYDE PARK	0	0	NS	0	0	NS
	0	0	0	0	0	0
KINGSTON	0	0	NS	0	0	NS
	0	0	0	0	0	0
SAUGERTIES	0	0	NS	0	0	NS
	0	0	0	0	0	0
CATSKILL	0	0	NS	0	0	NS
	0	0	0	0	0	0
ALBANY	NS	0	NS	NS	0	NS
	0	0	0	0	0	0

TABLE B-32 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 3. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATIUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE		YOUNG-OF-YEAR	
	CHANNEL	BOTTOM	CHANNEL	BOTTOM
YONKERS	1405	NS	32	NS
	721		32	0
TAPPAN ZEE	1163	305	406	0
	495	305	14	0
CROTON-HAVERSTRAW	1364	700	1434	0
	209	436	411	0
INDIAN POINT	2092	334	0	0
	567	171	0	0
WEST POINT	16525	1947	NS	NS
	1760	557		0
CORNWALL	4284	11756	1030	0
	1310	2721	432	0
POUGHKEEPSIE	4959	3688	NS	NS
	2228	1294		0
HYDE PARK	435	134	NS	NS
	164	45		0
KINGSTON	361	0	NS	NS
	108	0		0
SAUGERTIES	603	0	NS	NS
	119	0		0
CATSKILL	272	47	NS	NS
	157	47		0
ALBANY	NS	0	NS	NS
		0		0

TABLE B-33 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0 0	NS	0 0	0 0	NS	0 0
TAPPAN ZEE	3188 964	54 54	10993 8726	0 0	0 0	0 0
CROTON-HAVERSTRAW	14146 3259	1681 720	13035 4027	0 0	0 0	0 0
INDIAN POINT	49768 7682	3866 1263	2205 302	0 0	0 0	0 0
WEST POINT	63524 11392	3594 1017	NS	0 0	0 0	NS
CORNWALL	38322. 14341	4747 1325	6931 1324	0 0	0 0	0 0
POUGHKEEPSIE	16851 3551	2194 610	NS	0 0	0 0	NS
HYDE PARK	780 176	695 384	NS	0 0	0 0	NS
KINGSTON	200 100	86 53	NS	0 0	0 0	NS
SAUGERTIES	365 217	0 0	NS	0 0	0 0	NS
CATSKILL	0 0	84 42	NS	0 0	0 0	NS
ALBANY	NS	20 20	NS	NS	0 0	NS

TABLE B-34
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH
 POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 5. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	318 159	NS	0 0	0 0	NS	0 0
TAPPAN ZEE	19657 7189	7945 5141	5508 2746	0 0	0 0	0 0
CROTON-HAVERSTRAW	25278 12088	3788 1567	20094 5383	0 0	0 0	0 0
INDIAN POINT	11594 2268	2126 1084	561 360	0 0	0 0	0 0
WEST POINT	4688 1225	653 370	NS	0 0	0 0	NS
CORNWALL	65 65	-737 420	170 55	0 0	0 0	0 0
POUGHKEEPSIE	369 94	235 74	NS	0 0	0 0	NS
HYDE PARK	492 139	264 67	NS	0 0	0 0	NS
KINGSTON	767 198	111 111	NS	0 0	0 0	NS
SAUGERTIES	411 7	184 82	NS	0 0	0 0	NS
CATSKILL	379 379	170 90	NS	0 0	0 0	NS
ALBANY	NS	0 0	NS	NS	0 0	NS

TABLE B-35 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	101895	NS	1381	0	NS	0
	42949		400	0		0
TAPPAN ZEE	32977	626	15452	0	0	0
	23348	265	6882	0	0	0
CROTON-HAVERSTRAW	3973	955	72156	0	0	0
	343	702	30465	0	0	0
INDIAN POINT	5692	388	1225	0	0	0
	1622	205	1119	0	0	0
WEST POINT	1043	285	NS	0	0	NS
	347	128		0	0	
CORNWALL	68	75	18	0	0	0
	68	33	7	0	0	0
POUGHKEEPSIE	921	451	NS	0	0	NS
	249	172		0	0	
HYDE PARK	593	34	NS	0	0	NS
	280	22		0	0	
KINGSTON	108	0	NS	0	0	NS
	68	0		0	0	
SAUGERTIES	0	32	NS	0	0	NS
	0	32		0	0	
CATSKILL	0	0	NS	0	0	NS
	0	0		0	0	
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-36 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 7. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0 0	NS	0	0 0	NS	0
TAPPAN ZEE	4918 2794	NS	3423 1585	0 0	NS	0 0
CROTON-HAVERSTRAW	1702 691	1130 378	3298 1998	0 0	0 0	0 0
INDIAN POINT	3734 1040	1607 657	341 207	0 0	0 0	0 0
WEST POINT	5323 718	1115 262	NS	0 0	0 0	NS
CORNWALL	12423 3295	2384 668	893 311	0 0	0 0	0 0
POUGHKEEPSIE	21415 4616	3385 1026	NS	0 0	0 0	NS
HYDE PARK	196330 41262	21660 8780	NS	0 0	0 0	NS
KINGSTON	124505 37532	77232 11638	NS	0 0	0 0	NS
SAUGERTIES	162993 28809	15228 9185	NS	0 0	0 0	NS
CATSKILL	130847 52083	50566 15703	NS	0 0	0 0	NS
ALBANY	NS	1592 664	NS	NS	0 0	NS

TABLE B-37 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH POST YOLK-SAC LARVAE AND YOUNG-OF-YEAR DURING RIVER RUN 8. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	239 127	NS	0	0 0	NS	0
TAPPAN ZEE	29726 9260	13491 8324	23223 5791	0 0	0 0	0 0
CROTON-HAVERSTRAW	7500 2719	23887 11742	12907 7923	0 0	0 0	0 0
INDIAN POINT	66800 11213	21161 12650	3801 1591	0 0	0 0	0 0
WEST POINT	19482 3014	4064 1371	NS	0 0	0 0	NS
CORNWALL	27606 6245	15177 5445	9154 2205	0 0	0 0	0 0
POUGHKEEPSIE	206493 29021	54675 19899	NS	0 0	0 0	NS
HYDE PARK	310218 34720	56966 13669	NS	0 0	0 0	NS
KINGSTON	166733 56943	142042 14145	NS	0 0	0 0	NS
SAUGERTIES	272260 100642	187705 18242	NS	0 0	0 0	NS
CATSKILL	83534 36199	334604 137565	NS	0 0	0 0	NS
ALBANY	NS	7497 3634	NS	NS	0 0	NS

TABLE B-38 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 9. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	304	81	143	0	0	0
	304	50	143	0	0	0
CROTON-HAVERSTRAW	472	257	564	0	0	0
	246	92	169	0	0	0
INDIAN POINT	87293	5796	1246	0	0	0
	20301	2827	662	0	0	0
WEST POINT	85513	9525	NS	0	0	NS
	13090	2753		0	0	
CORNWALL	61811	20958	4235	0	0	0
	7280	4504	608	0	0	0
POUGHKEEPSIE	129317	64683	NS	0	0	NS
	13132	19578		0	0	
HYDE PARK	104275	25098	NS	0	0	NS
	29397	4161		0	0	
KINGSTON	58092	60728	NS	0	0	NS
	13987	1617		0	0	
SAUGERTIES	79173	64081	NS	0	0	NS
	4578	22440		0	0	
CATSKILL	70570	64176	NS	0	0	NS
	26066	34337		0	0	
ALBANY	NS	4531	NS	NS	0	NS
		4245			0	

TABLE B-39 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 10. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0 0	NS	0	0 0	NS	0
TAPPAN ZEE	1265 621	5448 4650	1530 336	0 0	0 0	0 0
CROTON-HAVERSTRAW	15613 2995	20944 5146	4097 1572	0 0	0 0	0 0
INDIAN POINT	77374 8152	29416 10140	2804 693	0 0	0 0	0 0
WEST POINT	57690 5663	34158 11898	NS	0 0	0 0	NS
CORNWALL	37693 6473	50513 9429	8849 4938	0 0	0 0	0 0
POUGHKEEPSIE	30426 2783	16019 3756	NS	0 0	0 0	NS
HYDE PARK	24874 6473	9423 1527	NS	0 0	0 0	NS
KINGSTON	45187 12721	51833 28992	NS	0 0	0 0	NS
SAUGERTIES	50413 32084	40475 10155	NS	0 0	0 0	NS
CATSKILL	13883 5750	27203 5985	NS	0 0	0 0	NS
ALBANY	NS	1466 1176	NS	NS	0 0	NS

TABLE B-40 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE PERCH POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 11. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	250 187	NS	352	0 0	NS	0
TAPPAN ZEE	1464 672	4503 1277	1587 957	0 0	0 0	0 0
CROTON-HAVERSTRAW	3540 1191	3208 818	3062 899	0 0	0 0	0 0
INDIAN POINT	9444 1249	5223 1076	2010 895	0 0	0 0	0 0
WEST POINT	4917 1207	2803 1872	NS	0 0	0 0	NS
CORNWALL	4693 1532	2665 658	252 43	0 0	0 0	0 0
POUGHKEEPSIE	17916 3291	7823 1870	NS	0 0	0 0	NS
HYDE PARK	12502 1212	9628 5077	NS	0 0	0 0	NS
KINGSTON	23811 7135	19841 7870	NS	0 0	91 91	NS
SAUGERTIES	58587 23658	35513 12209	NS	0 0	72 72	NS
CATSKILL	51277 50538	442 372	NS	0 0	0 0	NS
ALBANY	NS	0 0	NS	NS	0 0	NS

TABLE B-41
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD
 EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 2. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT
 SAMPLED.

REGION	EGGS		YOLK-SAC LARVAE	
	CHANNEL	BOTTOM	CHANNEL	BOTTOM
YONKERS	0	NS	0	NS
	0	0	0	0
TAPPAN ZEE	0	0	0	0
	0	0	0	0
CRUTON-HAYERSTRAW	0	0	0	0
	0	0	0	0
INDIAN POINT	0	0	0	0
	0	0	0	0
WEST POINT	0	0	NS	0
	0	0	0	0
CORNWALL	0	0	0	0
	0	0	0	0
POUGHKEEPSIE	0	187	0	18
	0	135	0	18
HYDE PARK	0	558	80	21
	0	538	55	14
KINGSTON	974	265	194	171
	371	134	79	69
SAUGERTIES	4678	24483	106	374
	2346	13978	106	195
CATSKILL	17571	37572	270	367
	8236	11974	270	74
ALBANY	NS	287608	NS	2152
		190923		621

TABLE B-42
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD
 EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 3. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT
 SAMPLED.

REGION	EGGS		YOLK-SAC LARVAE	
	CHANNEL	BOTTOM	CHANNEL	BOTTOM
YONKERS	0	NS	0	NS
	0	0	0	0
TAPPAN ZEE	0	0	0	0
	0	0	0	0
CROTON-HAVERSTRAW	0	0	0	0
	0	0	0	0
INDIAN POINT	0	0	0	0
	0	0	0	0
WEST POINT	0	0	91	0
	0	0	38	0
CORNWALL	0	12	63	396
	0	12	63	94
POUGHKEEPSIE	72	63	2461	520
	72	63	776	203
HYDE PARK	45	1382	3561	3972
	45	685	1295	1251
KINGSTON	35988	55342	2831	2969
	15406	40094	1343	1058
SAUGERTIES	9100	247043	935	22030
	8547	230333	382	13902
CATSKILL	408	5730	6321	32728
	408	2897	2849	3152
ALBANY	NS	135990	NS	4596
		86647		1670

TABLE B-43
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0	0	0	0	0	0
TAPPAN ZEE	0	0	0	0	0	0
	0	0	0	0	0	0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0	0	0	0	0	0
INDIAN POINT	0	0	0	0	0	12
	0	0	0	0	0	12
WEST POINT	0	0	NS	0	0	NS
	0	0	0	0	0	0
CORNWALL	0	0	0	70	24	6
	0	0	0	70	16	6
POUGHKEEPSIE	1638	332	NS	1847	848	NS
	1491	240		462	268	
HYDE PARK	0	487	NS	535	1143	NS
	0	331		209	521	
KINGSTON	156	3659	NS	1359	639	NS
	156	3302		471	209	
SAUGERTIES	125	12516	NS	1439	1463	NS
	125	3732		219	412	
CATSKILL	5726	10755	NS	1460	1577	NS
	2198	6594		613	167	
ALBANY	NS	0	NS	NS	9963	NS
		0			4648	

TABLE B-44 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 5. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
	YONKERS	0	NS	0	0	NS
TAPPAN ZEE	0	0	0	0	0	0
CROTON-HAVERSTRAW	0	0	0	53	211	1805
	0	0	0	53	152	1456
INDIAN POINT	0	0	0	6595	1462	482
	0	0	0	2305	771	415
WEST POINT	0	12	NS	26945	5293	NS
	0	12	NS	7821	1498	NS
CORNWALL	0	30	0	4985	8523	5164
	0	20	0	2102	3538	1966
POUGHKEEPSIE	0	0	NS	22643	16564	NS
	0	0	NS	9531	4597	NS
HYDE PARK	39	516	NS	2090	12744	NS
	39	335	NS	397	3346	NS
KINGSTON	275	1190	NS	1917	3179	NS
	102	428	NS	566	1775	NS
SAUGERTIES	0	1397	NS	2278	3356	NS
	0	722	NS	1659	744	NS
CATSKILL	771	3725	NS	1156	4012	NS
	628	2168	NS	158	1303	NS
ALBANY	NS	1317	NS	NS	299	NS
		702	NS		138	NS

TABLE B-45 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0 0	NS	0 0	474 474	NS	0 0
TAPPAN ZEE	0 0	0 0	0 0	948 791	132 132	1044 551
CROTON-HAVERSTRAW	0 0	0 0	0 0	265 156	176 59	4834 1806
INDIAN POINT	43 43	0 0	0 0	24626 19166	1173 575	268 56
WEST POINT	0 0	0 0	NS	9464 3224	1542 565	NS
CORNWALL	0 0	0 0	0 0	1213 892	463 113	546 207
POUGHKEEPSIE	67 67	1440 806	NS	3535 814	4994 1954	NS
HYDE PARK	0 0	0 0	NS	1965 424	3217 2242	NS
KINGSTON	0 0	1139 1094	NS	4778 4205	525 290	NS
SAUGERTIES	2226 1132	14023 8947	NS	2126 642	2166 1245	NS
CATSKILL	9211 4743	46980 28128	NS	2512 640	2623 396	NS
ALBANY	NS	16164 1223	NS	NS	8385 3978	NS

TABLE B-46 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 7. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	0	NS	0	0	NS	0
	0			0		
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0	0	0	0	0	0
INDIAN POINT	0	0	0	0	0	0
	0	0	0	0	0	0
WEST POINT	0	0	NS	0	0	NS
	0	0		0		
CORNWALL	0	0	0	0	0	0
	0	0		0		
POUGHKEEPSIE	0	36	NS	52	0	NS
	0	36		52	0	
HYDE PARK	0	46	NS	441	44	NS
	0	46		167	27	
KINGSTON	0	61	NS	2967	1104	NS
	0	35		1152	239	
SAUGERTIES	201	531	NS	5714	491	NS
	201	531		2103	491	
CATSKILL	359	2720	NS	42241	2187	NS
	359	1177		27409	222	
ALBANY	NS	479	NS	NS	2659	NS
		434			1548	

TABLE B-47

1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 8. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	0	0	0	0	0	0
	0			0		
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0			0		
INDIAN POINT	0	0	0	0	0	0
	0			0		
WEST POINT	0	0	NS	0	0	NS
	0			0		
CORNWALL	0	0	0	0	0	0
	0			0		
POUGHKEEPSIE	0	0	NS	0	33	NS
	0			0	33	
HYDE PARK	0	0	NS	0	0	NS
	0			0		
KINGSTON	0	0	NS	0	0	NS
	0			0		
SAUGERTIES	0	3639	NS	1106	421	NS
	0	3639		633	222	
CATSKILL	0	0	NS	2432	916	NS
	0			2016	602	
ALBANY	NS	0	NS	NS	46	NS
		0			25	

TABLE B-4B 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 9. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
VONKERS	0 0	NS	0	0 0	NS	0
TAPPAN ZEE	0 0	0 0	0 0	0 0	0 0	0 0
CROTON-HAVERSTRAW	0 0	0 0	0 0	0 0	0 0	0 0
INDIAN POINT	0 0	0 0	0 0	0 0	0 0	0 0
WEST POINT	0 0	0 0	NS	0 0	0 0	NS
CORNWALL	0 0	0 0	0 0	0 0	0 0	0 0
POUGHKEEPSIE	0 0	0 0	NS	0 0	0 0	NS
HYDE PARK	0 0	0 0	NS	0 0	0 0	NS
KINGSTON	0 0	0 0	NS	0 0	0 0	NS
SAUGERTIES	0 0	0 0	NS	0 0	0 0	NS
CAISKILL	0 0	0 0	NS	198 198	0 0	NS
ALBANY	NS	0 0	NS	NS	0 0	NS

1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 10. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS		YOLK-SAC LARVAE			
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	0	0	0	0	0	0
	0			0		
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0			0		
INDIAN POINT	0	0	0	0	0	0
	0			0		
WEST POINT	0	0	NS	0	0	NS
	0			0		
CORNWALL	0	0	0	0	0	0
	0			0		
POUGHKEEPSIE	0	0	NS	0	0	NS
	0			0		
HYDE PARK	0	0	NS	0	0	NS
	0			0		
KINGSTON	0	0	NS	0	0	NS
	0			0		
SAUGERTIES	0	0	NS	0	0	NS
	0			0		
CATSKILL	0	0	NS	0	0	NS
	0			0		
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-50
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD
 EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 11. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT
 SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	0	0	0	0	0	0
	0			0		
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0			0		
INDIAN POINT	0	0	0	0	0	0
	0			0		
WEST POINT	0	0	NS	0	0	NS
	0			0		
CORNWALL	0	0	0	0	0	0
	0			0		
POUGHKEEPSIE	0	0	NS	0	0	NS
	0			0		
HYDE PARK	0	0	NS	0	0	NS
	0			0		
KINGSTON	0	0	NS	0	0	NS
	0			0		
SAUGERTIES	0	0	NS	0	0	NS
	0			0		
CATSKILL	0	0	NS	0	0	NS
	0			0		
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-51 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD
 POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 2. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0		0	0		0
TAPPAN ZEE	0	0	0	0	0	0
	0		0	0		0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0		0	0		0
INDIAN POINT	0	0	0	0	0	0
	0		0	0		0
WEST POINT	0	0	NS	0	0	NS
	0			0		
CORNWALL	0	0	0	0	0	0
	0		0	0		0
POUGHKEEPSIE	0	0	NS	0	0	NS
	0			0		
HYDE PARK	0	0	NS	0	0	NS
	0			0		
KINGSTON	0	0	NS	0	0	NS
	0			0		
SAUGERTIES	0	0	NS	0	0	NS
	0			0		
CATSKILL	0	0	NS	0	0	NS
	0			0		
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-52 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD
 POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 3. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE		YOUNG-OF-YEAR	
	CHANNEL	SHOAL	CHANNEL	SHOAL
YONKERS	0	0	0	0
	0	0	0	0
TAPPAN ZEE	0	0	0	0
	0	0	0	0
CROTON-HAVERSTRAW	0	0	0	0
	0	0	0	0
INDIAN POINT	0	0	0	0
	0	0	0	0
WEST POINT	0	NS	0	NS
	0	0	0	0
CORNWALL	0	0	0	0
	0	0	0	0
POUGHKEEPSIE	0	NS	0	NS
	0	0	0	0
HYDE PARK	0	NS	0	NS
	0	0	0	0
KINGSTON	0	NS	0	NS
	0	0	0	0
SAUGERTIES	0	NS	0	NS
	0	0	0	0
CATSKILL	0	NS	0	NS
	0	0	0	0
ALBANY	NS	NS	NS	NS
	0	0	0	0

TABLE B-53' 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD
 POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 4. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE		YOUNG-OF-YEAR			
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0		0			0
TAPPAN ZEE	0	0	0	0	0	0
	0		0			0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0		0			0
INDIAN POINT	0	0	0	0	0	0
	0		0			0
WEST POINT	155	12	NS	0	0	NS
	56	12				
CORNWALL	329	12	6	0	0	0
	183	12	6	0	0	0
POUGHKEEPSIE	2768	969	NS	0	0	NS
	588	282				
HYDE PARK	3506	3536	NS	0	0	NS
	1084	1645				
KINGSTON	8276	500	NS	0	0	NS
	3685	228				
SAUGERTIES	3534	436	NS	0	0	NS
	1613	211				
CATSKILL	1984	426	NS	0	0	NS
	330	155				
ALBANY	NS	2119	NS	NS	0	NS
		435			0	

TABLE B-54 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD
 POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 5. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0		0	0		0
TAPPAN ZEE	0	0	0	0	0	0
	0	0	0	0	0	0
CROTON-HAVERSTRAW	554	81	946	0	0	0
	554	81	463	0	0	0
INDIAN POINT	3671	628	249	0	0	0
	1434	278	127	0	0	0
WEST POINT	13970	9426	NS	0	0	NS
	3164	5127		0	0	
CORNWALL	1101	2918	4106	0	0	0
	505	2873	2711	0	0	0
POUGHKEEPSIE	3547	2912	NS	0	0	NS
	1234	1214		0	0	
HYDE PARK	109	647	NS	0	0	NS
	79	419		0	0	
KINGSTON	170	0	NS	0	0	NS
	120	0		0	0	
SAUGERTIES	133	197	NS	0	0	NS
	133	55		0	0	
CATSKILL	99	93	NS	0	0	NS
	99	93		0	0	
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-55 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE		YOUNG-OF-YEAR	
	CHANNEL	BOTTOM	CHANNEL	BOTTOM
YONKERS	158	NS	0	NS
	158	0	0	0
TAPPAN ZEE	964	58	0	0
	437	58	0	0
CROTON-HAVERSTRAW	247	0	2655	0
	97	0	679	0
INDIAN POINT	52552	1964	240	0
	39582	773	147	0
WEST POINT	14501	10595	NS	NS
	5689	4257	0	0
CORNWALL	610	1704	261	0
	228	1029	167	0
POUGHKEEPSIE	3688	2968	NS	NS
	1260	1520	0	0
HYDE PARK	1422	277	NS	NS
	517	116	0	0
KINGSTON	3535	630	NS	NS
	2284	281	0	0
SAUGERTIES	1007	447	NS	NS
	829	406	0	0
CATSKILL	583	55	NS	NS
	583	55	0	0
ALBANY	NS	72	NS	NS
		72	0	0

TABLE B-56 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 7. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE		YOUNG-OF-YEAR	
	CHANNEL	BOTTOM	CHANNEL	BOTTOM
YONKERS	0	NS	0	NS
	0	0	0	0
TAPPAN ZEE	0	NS	0	NS
	0	0	0	0
CROTON-HAVERSTRAW	0	0	0	0
	0	0	0	0
INDIAN POINT	36	0	0	0
	36	0	0	0
WEST POINT	0	0	0	0
	0	0	NS	NS
CORNWALL	0	0	0	0
	0	0	0	0
POUGHKEEPSIE	0	0	NS	NS
	0	0	0	0
HYDE PARK	0	0	NS	NS
	0	0	0	0
KINGSTON	106	122	0	0
	67	3.	0	0
SAUGERTIES	0	109	0	0
	0	109	0	0
CATSKILL	19166	317	0	0
	10275	317	0	0
ALBANY	NS	228	NS	0
		150		

TABLE B-57 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN B. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	0	0	0	0	0	0
	0	0	0	0	0	0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0	0	0	0	0	0
INDIAN POINT	0	0	0	0	0	0
	0	0	0	0	0	0
WEST POINT	0	0	NS	0	0	NS
	0	0		0	0	
CORNWALL	0	0	0	0	0	0
	0	0	0	0	0	0
POUGHKEEPSIE	0	33	NS	0	0	NS
	0	33		0	0	
HYDE PARK	508	0	NS	0	0	NS
	300	0		0	0	
KINGSTON	1360	0	NS	0	0	NS
	761	0		0	0	
SAUGERTIES	5705	2017	NS	0	0	NS
	3907	1326		0	0	
CATSKILL	43081	38997	NS	0	0	NS
	29597	16665		0	0	
ALBANY	NS	1162	NS	NS	0	NS
		826			0	

TABLE B-58
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD
 POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 9. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YUNKERS	0	NS	0	0	NS	0
TAPPAN ZEE	0	0	0	0	0	0
CROTON-HAVERSTRAW	0	0	0	0	0	0
INDIAN POINT	0	0	0	0	0	0
WEST POINT	0	0	NS	0	0	NS
CORNWALL	0	0	0	0	0	0
POUGHKEEPSIE	107	0	NS	0	0	NS
	73	0		0	0	
HYDE PARK	255	70	NS	0	0	NS
	113	70		0	0	
KINGSTON	1080	188	NS	0	0	NS
	354	78		0	0	
SAUGERTIES	4293	1456	NS	0	0	NS
	1925	562		0	0	
CATSKILL	18410	5406	NS	0	0	NS
	3641	2659		0	0	
ALBANY	NS	95	NS	NS	0	NS
		71			0	

TABLE B-59 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD
 POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 10. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YUNKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	0	0	0	0	0	0
	0			0		
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0			0		
INDIAN POINT	0	0	0	0	0	0
	0			0		
WEST POINT	0	0	NS	0	0	NS
	0			0		
CORNWALL	79	0	0	0	0	0
	56			0		
POUGHKEEPSIE	320	0	NS	54	0	NS
	130			54		
HYDE PARK	550	130	NS	337	140	NS
	313	130		119	90	
KINGSTON	699	238	NS	373	509	NS
	203	75		97	114	
SAUGERTIES	4001	1176	NS	2276	2401	NS
	2109	698		1130	930	
CATSKILL	2212	460	NS	101	1526	NS
	1620	320		101	390	
ALBANY	NS	34	NS	NS	17	NS
		34			17	

TABLE B-60 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR AMERICAN SHAD
 POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 11. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	0	0	0	0	0	0
	0	0	0	0	0	0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0	0	0	0	0	0
INDIAN POINT	0	0	0	0	0	0
	0	0	0	0	0	0
WEST POINT	0	0	NS	0	0	NS
	0	0		0	0	
CORNWALL	0	0	0	100	14	8
	0	0	0	57	14	8
POUGHKEEPSIE	0	0	NS	565	485	NS
	0	0		206	288	
HYDE PARK	98	38	NS	2894	854	NS
	65	38		1274	338	
KINGSTON	219	30	NS	2199	867	NS
	139	30		1717	299	
SAUGERTIES	2657	482	NS	12905	5987	NS
	2278	272		9115	1844	
CATSKILL	596	388	NS	703	874	NS
	351	51		565	91	
ALBANY	NS	0	NS	NS	76	NS
		0			40	

TABLE B-61 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ATLANTIC TOMCOD POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 2. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE		YOUNG-OF-YEAR	
	CHANNEL	SHOAL	CHANNEL	SHOAL
YONKERS	3876	NS	16345	NS
	3876	0	16345	0
TAPPAN ZEE	0	49640	0	116175
	0	38638	0	67729
CROTON-HAVERSTRAW	0	0	0	1002
	0	0	0	749
INDIAN POINT	0	40	180	522
	0	27	101	189
WEST POINT	0	0	96	31
	0	0	61	18
CORNWALL	0	35	0	693
	0	35	0	283
POUGHKEEPSIE	0	0	0	152
	0	0	0	65
HYDE PARK	0	0	0	11
	0	0	0	11
KINGSTON	0	0	0	0
	0	0	0	0
SAUGERTIES	0	0	0	0
	0	0	0	0
CATSKILL	0	0	0	0
	0	0	0	0
ALBANY	NS	0	NS	0
		0		0

TABLE B-62 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ATLANTIC TOMCOD POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 3. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE		YOUNG-OF-YEAR	
	CHANNEL	SHOAL	CHANNEL	SHOAL
YONKERS	0	425	0	143716
	0	425	0	142968
TAPPAN ZEE	0	0	0	0
	0	0	0	0
CROTON-HAVERSTRAW	0	0	0	0
	0	0	0	0
INDIAN POINT	0	0	61	0
	0	0	34	0
WEST POINT	0	NS	2419	NS
	0	0	906	703
CORNWALL	0	0	0	0
	0	0	0	0
POUGHKEEPSIE	0	NS	0	NS
	0	0	0	653
HYDE PARK	0	NS	0	NS
	0	0	0	1303
KINGSTON	0	NS	0	NS
	0	0	0	0
SAUGERTIES	0	NS	0	NS
	0	0	0	0
CATSKILL	0	NS	0	NS
	0	0	0	0
ALBANY	NS	NS	NS	NS
	0	0	0	0

TABLE B-63 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ATLANTIC TOMCOD POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	35
	0		0	0		35
TAPPAN ZEE	0	0	0	116	153163	131
	0	0	0	116	68224	131
CROTON-HAVERSTRAW	0	0	0	0	2526	0
	0	0	0	0	2424	0
INDIAN POINT	0	0	0	0	663	0
	0	0	0	0	261	0
WEST POINT	0	0	NS	249	172	NS
	0	0		151	99	
CORNWALL	0	0	0	0	16	0
	0	0	0	0	16	0
POUGHKEEPSIE	0	0	NS	0	1429	NS
	0	0		0	418	
HYDE PARK	0	0	NS	0	96	NS
	0	0		0	96	
KINGSTON	0	0	NS	0	70	NS
	0	0		0	41	
SAUGERTIES	0	0	NS	0	0	NS
	0	0		0	0	
CATSKILL	0	0	NS	0	0	NS
	0	0		0	0	
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-64 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ATLANTIC TOMCOD
 POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 5. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	425
	0		0	0		368
IAPPAN ZEE	0	0	0	0	24929	0
	0	0	0	0	15756	0
CROTON-HAVERSTRAW	0	0	0	0	15019	3124
	0	0	0	0	4587	1952
INDIAN POINT	0	0	0	41	1267	0
	0	0	0	41	300	0
WEST POINT	0	0	NS	80	1215	NS
	0	0		44	935	
CORNWALL	0	0	0	0	16	0
	0	0	0	0	16	0
POUGHKEEPSIE	0	0	NS	33	306	NS
	0	0		33	114	
HYDE PARK	0	0	NS	0	0	NS
	0	0		0	0	
KINGSTON	0	0	NS	0	0	NS
	0	0		0	0	
SAUGERTIES	0	0	NS	0	0	NS
	0	0		0	0	
CATSKILL	0	0	NS	0	0	NS
	0	0		0	0	
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-65 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ATLANTIC TOMCOD POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE		YOUNG-OF-YEAR	
	CHANNEL	SHOAL	CHANNEL	SHOAL
YUNKERS	0	NS	0	NS
	0	0	0	0
TAPPAN ZEE	0	0	0	5790
	0	0	0	2603
CROTON-HAVERSTRAW	0	0	0	2288
	0	0	0	370
INDIAN POINT	0	0	86	4410
	0	0	86	2145
WEST POINT	0	0	73	374
	0	NS	40	113
CORNWALL	0	0	0	112
	0	0	0	50
POUGHKEEPSIE	0	0	0	576
	0	NS	0	131
HYDE PARK	0	0	0	83
	0	NS	0	66
KINGSTON	0	0	0	0
	0	NS	0	0
SAUGERTIES	0	0	0	0
	0	NS	0	0
CATSKILL	0	0	0	0
	0	NS	0	0
ALBANY	NS	0	NS	0
	0	NS	0	0

TABLE B-66
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ATLANTIC TOMCOD
 POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 7. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	15715	NS	92773
	0			12053		
IAPPAN ZEE	0	NS	0	13878	NS	5235
	0			10759		3208
CROTON-HAVERSTRAW	0	0	0	4030	5689	3323
	0	0	0	1539	1478	1124
INDIAN POINT	0	0	0	8447	11088	545
	0	0	0	3628	3065	369
WEST POINT	0	0	NS	8510	1775	NS
	0	0		2727	449	
CORNWALL	0	0	0	117	755	80
	0	0	0	43	139	41
POUGHKEEPSIE	0	0	NS	212	1620	NS
	0	0		94	712	
HYDE PARK	0	0	NS	0	47	NS
	0	0		0	47	
KINGSTON	0	0	NS	0	31	NS
	0	0		0	31	
SAUGERTIES	0	0	NS	0	0	NS
	0	0		0	0	
CATSKILL	0	0	NS	0	0	NS
	0	0		0	0	
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-67 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ATLANTIC TOMCOD POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN B. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	13280	NS	5281
	0			13210		
IAPPAN ZEE	0	0	0	0	109230	3385
	0	0	0	0	90811	2970
CROTON-HAVERSTRAW	0	0	0	1465	10618	7447
	0	0	0	468	3486	4041
INDIAN POINT	0	0	0	11103	8331	324
	0	0	0	4325	5439	170
WEST POINT	0	0	NS	914	23345	NS
	0	0		309	16428	
CORNWALL	0	0	0	464	6196	376
	0	0	0	227	1214	207
POUGHKEEPSIE	0	0	NS	994	9182	NS
	0	0		414	2550	
HYDE PARK	0	0	NS	98	767	NS
	0	0		65	261	
KINGSTON	0	0	NS	0	56	NS
	0	0		0	56	
SAUGERTIES	0	0	NS	0	0	NS
	0	0		0	0	
CATSKILL	0	0	NS	0	74	NS
	0	0		0	74	
ALBANY	NS	0	NS	NS	22	NS
		0			22	

TABLE B-68 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ATLANTIC TOMCOD POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 9. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	68	NS	23180
	0			68		
TAPPAN ZEE	0	0	0	89	27251	2064
	0	0	0	89	15625	1853
CROTON-HAVERSTRAW	0	0	0	0	6006	412
	0	0	0	0	1818	412
INDIAN POINT	0	0	0	12429	11073	77
	0	0	0	3754	4809	58
WEST POINT	0	0	NS	9239	59281	NS
	0	0		2178	23983	
CORNWALL	0	0	0	176	9350	2067
	0	0	0	101	2006	1248
POUGHKEEPSIE	0	0	NS	285	3555	NS
	0	0		236	1680	
HYDE PARK	0	0	NS	99	23	NS
	0	0		65	23	
KINGSTON	0	0	NS	0	98	NS
	0	0		0	98	
SAUGERTIES	0	0	NS	0	38	NS
	0	0		0	38	
CATSKILL	0	0	NS	0	56	NS
	0	0		0	56	
ALBANY	NS	0	NS	NS	131	NS
		0			16	

TABLE B-69 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ATLANTIC TOMCOD POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 10. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE		YOUNG-OF-YEAR	
	CHANNEL	BOTTOM	CHANNEL	BOTTOM
YONKERS	0	NS	4049	NS
	0		3006	10635
TAPPAN ZEE	0	0	0	8701
	0	0	0	234
CROTON-HAVERSTRAW	0	0	188	12724
	0	0	188	2658
INDIAN POINT	0	0	6555	32015
	0	0	1613	6091
WEST POINT	0	0	9669	13141
	0	0	1879	4055
CORNWALL	0	0	206	3057
	0	0	120	752
POUGHKEEPSIE	0	0	322	4677
	0	0	153	1648
HYDE PARK	0	0	49	269
	0	0	49	150
KINGSTON	0	0	0	29
	0	0	0	29
SAUGERTIES	0	0	0	48
	0	0	0	48
CATSKILL	0	0	0	562
	0	0	0	562
ALBANY	NS	0	NS	18
		0		18

TABLE B-70 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ATLANTIC TOMCOD POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 11. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	1720	NS	10390
	0			1453		
TAPPAN ZEE	0	0	0	1411	12713	812
	0	0	0	1072	3484	427
CROTON-HAVERSTRAW	0	0	0	200	8502	4142
	0	0	0	127	2342	2651
INDIAN POINT	0	0	0	1668	7224	1076
	0	0	0	506	2636	713
WEST POINT	0	0	NS	2578	8379	NS
	0	0		720	2718	
CORNWALL	0	0	0	1195	4713	0
	0	0	0	449	1323	0
POUGHKEEPSIE	0	0	NS	1183	2515	NS
	0	0		608	844	
HYDE PARK	0	0	NS	48	48	NS
	0	0		48	48	
KINGSTON	0	0	NS	0	120	NS
	0	0		0	69	
SAUGERTIES	0	0	NS	0	38	NS
	0	0		0	38	
CATSKILL	0	0	NS	0	0	NS
	0	0		0	0	
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-71
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP.
 EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 2. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT
 SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0		0	0		0
TAPPAN ZEE	0	0	0	267	549	0
	0	0	0	136	388	0
CROTON-HAVERSTRAW	0	0	0	76	0	718
	0	0	0	48	0	290
INDIAN POINT	0	0	0	601	29	9
	0	0	0	123	18	9
WEST POINT	17	17	NS	786	65	NS
	17	17		145	48	
CORNWALL	0	0	0	1496	449	277
	0	0	0	955	114	100
POUGHKEEPSIE	515	482	NS	6315	3736	NS
	444	353		1229	1426	
HYDE PARK	0	890	NS	10574	3382	NS
	0	457		3491	1545	
KINGSTON	10702	13337	NS	14510	8482	NS
	7375	6106		3456	2276	
SAUGERTIES	139088	249358	NS	41049	14493	NS
	71658	171360		5990	3572	
CATSKILL	772133	554167	NS	19907	21090	NS
	722376	235438		9884	3938	
ALBANY	NS	50746	NS	NS	21170	NS
		22715			8965	

TABLE B-72 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP. EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 3. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0		0	0		0
TAPPAN ZEE	0	0	0	0	0	0
	0	0	0	0	0	0
CROTON-HAVERSTRAW	0	0	0	97	44	261
	0	0	0	43	44	100
INDIAN POINT	0	0	0	443	17	20
	0	0	0	89	17	20
WEST POINT	0	0	NS	1637	21	NS
	0	0		296	21	
CORNWALL	0	54	0	900	449	81
	0	19	0	533	166	30
POUGHKEEPSIE	1948	233	NS	38923	3090	NS
	1869	98		13479	1085	
HYDE PARK	2992	2733	NS	77360	22428	NS
	1706	634		14009	9519	
KINGSTON	28897	30679	NS	87866	27296	NS
	14779	19965		7281	10523	
SAUGERTIES	183127	116227	NS	102953	46588	NS
	182381	58661		32560	17822	
CATSKILL	3004	15399	NS	58904	64245	NS
	1141	3972		6933	8506	
ALBANY	NS	3259578	NS	NS	9451	NS
		2989192			3566	

TABLE B-73

1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP. EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0		0	0		0
TAPPAN ZEE	0	0	0	0	0	0
	0	0	0	0	0	0
CROTON-HAVERSTRAW	0	0	227	51	0	0
	0	0	227	51	0	0
INDIAN POINT	367	0	0	370	0	0
	367	0	0	101	0	0
WEST POINT	49	59	NS	962	78	NS
	49	33		198	45	
CORNWALL	0	24	0	1493	1056	598
	0	24	0	538	237	63
POUGHKEEPSIE	49453	28888	NS	29488	6390	NS
	38902	151101		7122	1529	
HYDE PARK	2389	1469	NS	26760	10244	NS
	1826	699		4531	2593	
KINGSTON	18032	28771	NS	12951	11376	NS
	11093	17499		2407	2680	
SAUGERTIES	23491	305939	NS	12905	3705	NS
	20396	169442		3371	958	
CATSKILL	315696	196204	NS	10502	13121	NS
	209814	103511		1442	4576	
ALBANY	NS	37799	NS	NS	19929	NS
		23253			5640	

TABLE B-74
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP.
 EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 5. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT
 SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0		0	0		0
TAPPAN ZEE	0	0	0	780	298	0
	0	0	0	780	298	0
CROTON-HAVERSTRAW	0	99	0	5664	464	14088
	0	99	0	3025	306	5983
INDIAN POINT	0	0	0	23280	2083	1117
	0	0	0	4908	770	588
WEST POINT	0	18	NS	74557	11109	NS
	0	18		17487	4962	
CORNWALL	0	104	0	37872	13467	4592
	0	50	0	11782	2369	1149
POUGHKEEPSIE	0	129	NS	23081	17086	NS
	0	110		3339	4541	
HYDE PARK	7054	24213	NS	11641	4377	NS
	4204	9536		2113	1565	
KINGSTON	12231	101626	NS	5648	0	NS
	5343	37177		1355	0	
SAUGERTIES	0	26821	NS	5720	2161	NS
	0	10684		1163	933	
CATSKILL	6721	28060	NS	2701	2195	NS
	6572	17549		402	2195	
ALBANY	NS	24203	NS	NS	179	NS
		12056			143	

TABLE B-75
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP.
 EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 6. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT
 SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YUNKERS	0	NS	63	325	NS	0
	0		63	162		0
TAPPAN ZEE	0	0	0	4413	58	699
	0	0	0	1415	58	503
CROTON-HAVERSTRAW	0	0	0	2628	29	4091
	0	0	0	1057	29	2271
INDIAN POINT	0	0	0	11308	273	855
	0	0	0	2059	273	429
WEST POINT	148	236	NS	8974	163	NS
	87	126		1771	100	
CORNWALL	0	631	7	884	980	297
	0	596	7	646	794	91
POUGHKEEPSIE	8661	62244	NS	2594	936	NS
	6068	59993		542	295	
HYDE PARK	1915	4625	NS	1850	2187	NS
	1791	2808		685	1012	
KINGSTON	2744	9830	NS	1224	518	NS
	2680	4641		605	236	
SAUGERTIES	280626	1255527	NS	2350	1858	NS
	166247	1003933		1789	1472	
CATSKILL	6430397	5331388	NS	5512	380	NS
	1629005	3407532		1614	301	
ALBANY	NS	413352	NS	NS	1467	NS
		103810			869	

TABLE B-76
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP.
 EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 7. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT
 SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
VONKERS	0 0	NS	0	0 0	NS	0
TAPPAN ZEE	0 0	NS	0	0 0	NS	0 0
CROTON-HAVERSTRAW	0 0	0 0	0 0	0 0	0 0	0 0
INDIAN POINT	0 0	0 0	0 0	262 174	25 25	0 0
WEST POINT	0 0	11 11	NS	119 60	58 39	NS
CORNWALL	0 0	0 0	0 0	26 26	72 42	24 24
POUGHKEEPSIE	100 68	526 493	NS	664 267	532 254	NS
HYDE PARK	239 162	634 343	NS	628 373	156 75	NS
KINGSTON	0 0	588 330	NS	1082 833	842 266	NS
SAUGERTIES	1421 987	9035 8544	NS	4043 2037	41 41	NS
CATSKILL	34283 16808	648229 367768	NS	21976 9664	1929 637	NS
ALBANY	NS	21529 10314	NS	NS	13945 7187	NS

TABLE B-77

1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP. EGGS AND YOLK-SAC LARVAE DURING RIVER RUN B. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	EGGS		SHOAL		YOLK-SAC LARVAE			
	CHANNEL	BOTTOM	SHOAL	SHOAL	CHANNEL	BOTTOM	SHOAL	SHOAL
YUNKERS	0	NS	0	0	0	NS	0	0
	0				0			
TAPPAN ZEE	0	0	0	0	0	0	0	0
	0		0		0		0	
CROTON-HAVERSTRAW	0	0	0	0	0	0	0	0
	0		0		0		0	
INDIAN POINT	0	0	9	9	0	0	0	0
	0		9		0		0	
WEST POINT	45	0	NS	NS	0	0	NS	NS
	45				0			
CORNWALL	0	0	0	0	0	48	12	12
	0		0		0	36	12	
POUGHKEEPSIE	101	327	NS	NS	53	0	NS	NS
	101	292			53			
HYDE PARK	0	0	NS	NS	101	26	NS	NS
	0				67	26		
KINGSTON	0	102	NS	NS	110	305	NS	NS
	0	102			110	219		
SAUGERTIES	0	4695	NS	NS	793	1862	NS	NS
	0	4618			436	960		
CATSKILL	93	205	NS	NS	7434	611	NS	NS
	93	130			1436	219		
ALBANY	NS	0	NS	NS	NS	238	NS	NS
		0				238		

TABLE B 7B
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP.
 EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 9. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT
 SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	0	0	0	0	0	0
	0	0	0	0	0	0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0	0	0	0	0	0
INDIAN POINT	0	0	0	0	0	0
	0	0	0	0	0	0
WEST POINT	0	0	NS	0	0	NS
	0	0		0		
CORNWALL	0	11	0	25	0	0
	0	11	0	25	0	0
POUGHKEEPSIE	0	0	NS	53	0	NS
	0	0		53		
HYDE PARK	0	0	NS	101	23	NS
	0	0		67	23	
KINGSTON	0	0	NS	57	29	NS
	0	0		57	29	
SAUGERTIES	0	0	NS	197	113	NS
	0	0		197	72	
CATSKILL	0	107	NS	0	56	NS
	0	54		0	56	
ALBANY	NS	17	NS	NS	133	NS
		17			62	

TABLE B-79
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP.
 EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 10. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT
 SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	0	0	0	0	0	0
	0			0		
CROTON-HAVERS DRAW	0	0	0	0	0	0
	0			0		
INDIAN POINT	0	0	0	0	0	0
	0			0		
WEST POINT	0	0	NS	0	0	NS
	0			0		
CORNWALL	0	0	0	0	0	0
	0			0		
POUGHKEEPSIE	0	0	NS	0	0	NS
	0			0		
HYDE PARK	0	0	NS	0	0	NS
	0			0		
KINGSTON	0	0	NS	0	0	NS
	0			0		
SAUGERTIES	0	0	NS	0	0	NS
	0			0		
CATSKILL	0	51	NS	0	0	NS
	0	51		0		
ALBANY	NS	0	NS	NS	49	NS
		0			29	

TABLE B 80
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP.
 EGGS AND YOLK-SAC LARVAE DURING RIVER RUN 11. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT
 SAMPLED.

REGION	EGGS			YOLK-SAC LARVAE		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	0	0	0	0	0	0
	0			0		
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0			0		
INDIAN POINT	0	0	0	0	0	0
	0			0		
WEST POINT	0	0	NS	0	0	NS
	0			0		
CORNWALL	0	0	0	0	0	0
	0			0		
POUGHKEEPSIE	0	0	NS	204	0	NS
	0			204		
HYDE PARK	0	0	NS	0	0	NS
	0			0		
KINGSTON	0	0	NS	0	0	NS
	0			0		
SAUGERTIES	0	0	NS	0	0	NS
	0			0		
CATSKILL	0	0	NS	1391	96	NS
	0			885	48	
ALBANY	NS	0	NS	NS	288	NS
		0			64	

TABLE B-81 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP. POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 2. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
VONKERS	0	NS	0	0	NS	0
	0		0	0		0
TAPPAN ZEE	0	69	637	0	0	0
	0	69	452	0	0	0
CROTON-HAVERSTRAW	581	182	143	0	0	0
	140	121	75	0	0	0
INDIAN POINT	6141	272	280	0	0	0
	1975	92	116	0	0	0
WEST POINT	2172	206	NS	0	0	NS
	552	145		0	0	
CORNWALL	3576	418	384	0	0	0
	1580	242	211	0	0	0
POUGHKEEPSIE	5309	6595	NS	0	0	NS
	2321	4358		0	0	
HYDE PARK	15402	2738	NS	0	0	NS
	7677	849		0	0	
KINGSTON	1723	888	NS	0	0	NS
	418	347		0	0	
SAUGERTIES	0	44	NS	0	0	NS
	0	44		0	0	
CATSKILL	90	0	NS	0	0	NS
	90	0		0	0	
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-82 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP. POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 3. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	815 602	NS	64 64	0 0	NS	0 0
TAPPAN ZEE	1333 448	731 731	524 262	0 0	0 0	0 0
CROTON-HAVERSTRAW	929 544	37 37	868 399	0 0	0 0	0 0
INDIAN POINT	9008 3854	2517 1858	440 305	0 0	0 0	0 0
WEST POINT	14308 3201	1395 575	NS	0 0	0 0	NS
CORNWALL	11958 7019	58319 33371	11447 2583	0 0	0 0	0 0
POUGHKEEPSIE	105935 45788	14556 7755	NS	0 0	0 0	NS
HYDE PARK	41180 13073	6749 2805	NS	0 0	0 0	NS
KINGSTON	14728 3369	10079 3263	NS	0 0	0 0	NS
SAUGERTIES	11588 4314	1289 709	NS	0 0	0 0	NS
CATSKILL	0 0	556 436	NS	0 0	0 0	NS
ALBANY	NS	0 0	NS	NS	0 0	NS

TABLE B-83

1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP.
 POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 4. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0		0	0		0
TAPPAN ZEE	664	0	2319	0	0	0
	295	0	1938	0	0	0
CROTON-HAVERSTRAW	5686	267	7209	0	0	0
	1887	225	3035	0	0	0
INDIAN POINT	48395	1665	3133	0	0	0
	16688	613	1213	0	0	0
WEST POINT	41889	2376	NS	0	0	NS
	10497	848		0	0	
CORNWALL	47115	828	9615	0	0	0
	13926	354	2303	0	0	0
POUGHKEEPSIE	256622	40201	NS	0	1010	NS
	63131	13024		0	1010	
HYDE PARK	65868	13103	NS	0	0	NS
	30829	4657		0	0	
KINGSTON	16754	780	NS	0	0	NS
	7100	340		0	0	
SAUGERTIES	1349	329	NS	0	0	NS
	832	258		0	0	
CATSKILL	0	84	NS	0	0	NS
	0	42		0	0	
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-84 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP. POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 5. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE		YOUNG-OF-YEAR	
	CHANNEL	BOTTOM	CHANNEL	BOTTOM
YONKERS	478	NS	60	NS
	478		60	0
TAPPAN ZEE	2880	2604	3343	0
	1741	1716	1433	0
CROTON-HAVERSTRAW	98194	40100	222484	0
	48469	38329	111594	0
INDIAN POINT	408666	88445	80724	0
	42143	30076	73524	0
WEST POINT	645370	252991	NS	NS
	111745	82227		0
CORNWALL	47846	271103	66964	0
	9063	146466	31558	0
POUGHKEEPSIE	77980	135101	NS	NS
	14758	48586		0
HYDE PARK	12807	9951	NS	NS
	4384	3135		0
KINGSTON	4565	289	NS	NS
	2024	195		0
SAUGERTIES	2739	4101	NS	NS
	349	989		0
CATSKILL	1741	7709	NS	NS
	174	7709		0
ALBANY	NS	25	NS	NS
		25		0

TABLE B-85 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP. POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE		YOUNG-OF-YEAR	
	CHANNEL	BOTTOM	CHANNEL	SHOAL
YONKERS	40926	NS	0	NS
	178439		0	0
TAPPAN ZEE	630077	41251	0	0
	158634	21890	0	0
CROTON-HAVERSTRAW	189092	9981	0	0
	58061	885	0	0
INDIAN POINT	221375	71216	0	0
	48449	34999	0	0
WEST POINT	136275	13687	0	NS
	25346	5538	0	0
CORNWALL	15845	21423	0	0
	4964	9298	0	0
POUGHKEEPSIE	15198	24588	0	NS
	2339	8175	0	0
HYDE PARK	7461	14673	0	NS
	1734	11066	0	0
KINGSTON	3910	2906	0	NS
	1255	1427	0	0
SAUGERTIES	1612	1847	0	NS
	753	1540	0	0
CATSKILL	873	383	0	NS
	338	198	0	0
ALBANY	NS	134	NS	NS
		48	0	0

TABLE B-86 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP. POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 7. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	304 204	NS	0	0 0	NS	0
TAPPAN ZEE	451 233	NS	1721 1721	0 0	NS	0 0
CROTON-HAVERSTRAW	73 46	875 399	671 508	0 0	0 0	0 0
INDIAN POINT	14902 5485	5516 2278	317 163	0 0	0 0	11 11
WEST POINT	25673 3123	3336 1177	NS	0 0	0 0	NS
CORNWALL	2406 651	3774 1268	1542 294	0 0	0 0	0 0
POUGHKEEPSIE	17360 6173	24104 14507	NS	0 0	0 0	NS
HYDE PARK	268986 64985	53199 22378	NS	0 0	0 0	NS
KINGSTON	232341 26925	182560 25694	NS	0 0	0 0	NS
SAUGERTIES	699970 33478	142950 125890	NS	0 0	0 0	NS
CATSKILL	2164064 816995	689356 223771	NS	0 0	0 0	NS
ALBANY	NS	249729 51465	NS	NS	0 0	NS

TABLE B-87 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP. POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 8. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	61	NS	0	0	NS	0
	61			0		
TAPPAN ZEE	713	99	658	0	0	0
	365	61	463	0	0	0
CROTON-HAVERSTRAW	257	122	192	0	0	0
	84	63	141	0	0	0
INDIAN POINT	602	746	24	0	26	0
	183	239	16	0	26	0
WEST POINT	1389	310	NS	0	0	NS
	652	81		0		
CORNWALL	387	441	463	0	0	0
	141	158	149	0	0	0
POUGHKEEPSIE	10782	25758	NS	0	0	NS
	2577	20031		0	0	
HYDE PARK	84233	72921	NS	0	0	NS
	18060	9050		0	0	
KINGSTON	236917	96844	NS	0	0	NS
	90787	32935		0	0	
SAUGERTIES	512547	603380	NS	0	0	NS
	117037	110268		0	0	
CATSKILL	132298	1028493	NS	0	0	NS
	29906	401077		0	0	
ALBANY	NS	65329	NS	NS	0	NS
		24981			0	

TABLE B-88 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP. POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 9. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	0	273	0	0	0	0
	0	220	0	0	0	0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0	0	0	0	0	0
INDIAN POINT	217	26	16	0	0	0
	119	26	16	0	0	0
WEST POINT	418	115	NS	0	0	NS
	129	40		0	0	
CORNWALL	558	208	424	25	0	0
	197	52	240	25	0	0
POUGHKEEPSIE	27712	7297	NS	0	0	NS
	5703	2156		0	0	
HYDE PARK	107947	10055	NS	0	0	NS
	34189	1833		0	0	
KINGSTON	71697	65141	NS	0	0	NS
	13609	14611		0	0	
SAUGERTIES	178478	53569	NS	0	0	NS
	38761	9087		0	0	
CATSKILL	846729	91902	NS	0	0	NS
	312527	11215		0	0	
ALBANY	NS	48028	NS	NS	0	NS
		19484			0	

TABLE B-89 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP. POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 10 STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	0	0	0	0	0	0
	0	0	0	0	0	0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0	0	0	0	0	0
INDIAN POINT	0	29	0	0	0	0
	0	29	0	0	0	0
WEST POINT	234	258	NS	0	0	NS
	120	93		0		
CORNWALL	1493	822	243	0	0	0
	354	278	35	0	0	0
POUGHKEEPSIE	60709	5483	NS	0	0	NS
	13254	1352		0		
HYDE PARK	49389	14032	NS	0	0	NS
	13400	7506		0		
KINGSTON	133440	26256	NS	0	0	NS
	27441	9618		0		
SAUGERTIES	85308	82185	NS	189	0	NS
	7028	33630		189	0	
CATSKILL	76847	84369	NS	0	0	NS
	19628	1138		0		
ALBANY	NS	23308	NS	NS	0	NS
		13281				

TABLE B-90 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR ALOSA SP. POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 11. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	0	0	0	0	0	0
	0	0	0	0	0	0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0	0	0	0	0	0
INDIAN POINT	132	23	25	0	0	0
	76	23	25	0	0	0
WEST POINT	889	107	NS	0	12	NS
	199	107		0	12	
CORNWALL	2897	297	192	27	12	0
	1247	130	35	27	12	0
POUGHKEEPSIE	35936	688	NS	1620	90	NS
	12391	121		931	62	
HYDE PARK	18085	1467	NS	6531	1103	NS
	4889	769		2973	487	
KINGSTON	80380	12449	NS	3345	4818	NS
	24004	2260		2110	892	
SAUGERTIES	184302	53138	NS	51236	27956	NS
	63191	17140		30770	8992	
CATSKILL	162050	27360	NS	6378	11257	NS
	86132	13803		4106	2348	
ALBANY	NS	1621	NS	NS	1539	NS
		528			164	

TABLE B-91 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR BLUEBACK HERRING YOUNG OF YEAR DURING RIVER RUNS 2 AND 3. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0		0	0		0
TAPPAN ZEE	0	0	0	0	0	0
	0		0	0		0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0		0	0		0
INDIAN POINT	0	0	0	0	0	0
	0		0	0		0
WEST POINT	0	0	NS	0	0	NS
	0			0		
CORNWALL	0	0	0	0	0	0
	0		0	0		0
POUGHKEEPSIE	0	0	NS	0	0	NS
	0			0		
HYDE PARK	0	0	NS	0	0	NS
	0			0		
KINGSTON	0	0	NS	0	0	NS
	0			0		
SAUGERTIES	0	0	NS	0	0	NS
	0			0		
CATSKILL	0	0	NS	0	0	NS
	0			0		
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-92
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR BLUEBACK HERRING
 YOUNG OF YEAR DURING RIVER RUNS 4 AND 5. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED
 BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YUNKERS	0	NS	0	0	NS	0
	0	0	0	0	0	0
IAPPAN ZEE	0	0	0	0	0	0
	0	0	0	0	0	0
CRONON-HAVERSTRAW	0	0	0	0	0	0
	0	0	0	0	0	0
INDIAN POINT	0	0	0	0	0	0
	0	0	0	0	0	0
WEST POINT	0	0	NS	0	0	NS
	0	0	0	0	0	0
CORNWALL	0	0	0	0	0	0
	0	0	0	0	0	0
POUGHKEEPSIE	0	0	NS	0	0	NS
	0	0	0	0	0	0
HYDE PARK	0	0	NS	0	0	NS
	0	0	0	0	0	0
KINGSTON	0	0	NS	0	0	NS
	0	0	0	0	0	0
SAUGERTIES	0	0	NS	0	0	NS
	0	0	0	0	0	0
CATSKILL	0	0	NS	0	0	NS
	0	0	0	0	0	0
ALBANY	NS	0	NS	NS	0	NS
	0	0	0	0	0	0

TABLE B-93 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR BLUEBACK HERRING YOUNG OF YEAR DURING RIVER RUNS 6 AND 7. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0		0	0		
TAPPAN ZEE	0	0	0	0	NS	0
	0		0	0		0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0		0	0		0
INDIAN POINT	0	0	0	0	0	0
	0		0	0		0
WEST POINT	0	0	NS	0	0	NS
	0			0		
CORNWALL	0	0	0	0	0	0
	0		0	0		0
POUGHKEEPSIE	0	0	NS	0	0	NS
	0			0		
HYDE PARK	0	0	NS	0	0	NS
	0			0		
KINGSTON	0	0	NS	0	0	NS
	0			0		
SAUGERTIES	0	0	NS	0	76	NS
	0			0	76	
CATSKILL	0	0	NS	0	0	NS
	0			0		
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-94 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR BLUEBACK HERRING YOUNG OF YEAR DURING RIVER RUNS 8 AND 9. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	0	0	0	0	0	0
	0			0		
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0			0		
INDIAN POINT	0	0	0	0	0	0
	0			0		
WEST POINT	0	0	NS	0	0	NS
	0			0		
CORNWALL	0	0	0	0	0	0
	0			0		
POUGHKEEPSIE	0	0	NS	0	0	NS
	0			0		
HYDE PARK	0	0	NS	0	0	NS
	0			0		
KINGSTON	0	0	NS	0	0	NS
	0			0		
SAUGERTIES	0	0	NS	0	0	NS
	0			0		
CATSKILL	0	0	NS	0	0	NS
	0			0		
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-95 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR BLUEBACK HERRING YOUNG OF YEAR DURING RIVER RUNS 10 AND 11. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR		YOUNG-OF-YEAR		YOUNG-OF-YEAR	
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0					
TAPPAN ZEE	0	0	0	0	56	0
	0	0	0	0	56	0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0	0	0	0	0	0
INDIAN POINT	0	0	0	0	0	0
	0	0	0	0	0	0
WEST POINT	0	0	NS	0	0	NS
	0	0				
CORNWALL	0	0	0	0	0	0
	0	0	0	0	0	0
POUGHKEEPSIE	0	0	NS	0	0	NS
	0	0				
HYDE PARK	0	0	NS	0	0	NS
	0	0				
KINGSTON	0	0	NS	0	0	NS
	0	0				
SAUGERTIES	0	0	NS	0	0	NS
	0	0				
CATSKILL	0	0	NS	0	0	NS
	0	0				
ALBANY	NS	0	NS	NS	60	NS
		0			60	

TABLE B-96 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR BAY ANCHOVY POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 2. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0	0	0	0	0	0
IAPPAN ZEE	0	0	0	0	0	0
	0	0	0	0	0	0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0	0	0	0	0	0
INDIAN POINT	0	0	0	0	0	0
	0	0	0	0	0	0
WEST POINT	0	0	NS	0	0	NS
	0	0	0	0	0	0
CORNWALL	0	0	0	0	0	0
	0	0	0	0	0	0
POUGHKEEPSIE	0	0	NS	0	0	NS
	0	0	0	0	0	0
HYDE PARK	0	0	NS	0	0	NS
	0	0	0	0	0	0
KINGSTON	0	0	NS	0	0	NS
	0	0	0	0	0	0
SAUGERTIES	0	0	NS	0	0	NS
	0	0	0	0	0	0
CATSKILL	0	0	NS	0	0	NS
	0	0	0	0	0	0
ALBANY	NS	0	NS	NS	0	NS
	0	0	0	0	0	0

TABLE B-97
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR BAY ANCHOVY
 POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 3. STANDARD ERRORS (IN THOUSANDS)
 ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0		0	0		0
TAPPAN ZEE	0	0	0	0	0	0
	0		0	0		0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0		0	0		0
INDIAN POINT	0	0	0	0	0	0
	0		0	0		0
WEST POINT	0	0	NS	0	0	NS
	0			0		
CORNWALL	0	0	0	0	0	0
	0		0	0		0
POUGHKEEPSIE	0	0	NS	0	0	NS
	0			0		
HYDE PARK	0	0	NS	0	0	NS
	0			0		
KINGSTON	0	0	NS	0	0	NS
	0			0		
SAUGERTIES	0	0	NS	0	0	NS
	0			0		
CATSKILL	0	0	NS	0	0	NS
	0			0		
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-98 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR BAY ANCHOVY POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0		0	0		0
TAPPAN ZEE	0	0	0	0	0	0
	0		0	0		0
CRUTON-HAVERSTRAW	0	0	0	0	0	0
	0		0	0		0
INDIAN POINT	0	0	0	0	0	0
	0		0	0		0
WEST POINT	0	0	NS	0	0	NS
	0			0		
CORNWALL	0	0	0	0	0	0
	0		0	0		0
POUGHKEEPSIE	0	0	NS	0	0	NS
	0			0		
HYDE PARK	0	0	NS	0	0	NS
	0			0		
KINGSTON	0	0	NS	0	0	NS
	0			0		
SAUGERTIES	0	0	NS	0	0	NS
	0			0		
CATSKILL	0	0	NS	0	0	NS
	0			0		
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-99 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR BAY ANCHOVY POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 5. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0		0	0		0
TAPPAN ZEE	0	0	0	0	0	1493
	0		0	0		1493
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0		0	0		0
INDIAN POINT	0	0	0	0	0	0
	0		0	0		0
WEST POINT	0	0	NS	0	0	NS
	0			0		
CORNWALL	0	0	0	0	0	0
	0		0	0		0
POUGHKEEPSIE	0	0	NS	0	0	NS
	0			0		
HYDE PARK	0	0	NS	0	0	NS
	0			0		
KINGSTON	0	0	NS	0	0	NS
	0			0		
SAUGERTIES	0	0	NS	0	0	NS
	0			0		
CATSKILL	0	0	NS	0	0	NS
	0			0		
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-100 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR BAY ANCHOVY POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE		YOUNG-OF-YEAR	
	CHANNEL	BOTTOM	CHANNEL	BOTTOM
YONKERS	0	NS	0	NS
TAPPAN ZEE	0	0	0	0
CROTON-HAVERSTRAW	0	0	0	0
INDIAN POINT	0	0	0	0
WEST POINT	0	0	0	0
CORNWALL	0	0	0	0
POUGHKEEPSIE	0	0	0	0
HYDE PARK	0	0	0	0
KINGSTON	0	0	0	0
SAUGERTIES	0	0	0	0
CATSKILL	0	0	0	0
ALBANY	NS	0	NS	0

TABLE B-101

1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR BAY ANCHOVY POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 7. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE		YOUNG-OF-YEAR	
	CHANNEL	SHOAL	CHANNEL	SHOAL
YONKERS	0 0	NS 0	0 0	NS 0
TAPPAN ZEE	0 0	NS 0	0 0	NS 0
CROTON-HAVERSTRAW	0 0	0 0	0 0	0 0
INDIAN POINT	0 0	0 0	0 0	0 0
WEST POINT	0 0	0 0	0 0	NS 0
CORNWALL	0 0	0 0	0 0	0 0
POUGHKEEPSIE	55 55	NS 0	0 0	NS 0
HYDE PARK	0 0	0 0	0 0	NS 0
KINGSTON	0 0	0 0	0 0	NS 0
SAUGERTIES	0 0	0 0	0 0	NS 0
CATSKILL	0 0	0 0	0 0	NS 0
ALBANY	NS	0 0	NS	0 0

TABLE B-102 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR BAY ANCHOVY POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 8. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	120 79	NS	0	0 0	NS	0
TAPPAN ZEE	0 0	0 0	279 279	0 0	0 0	0 0
CROTON-HAVERSTRAW	0 0	0 0	0 0	0 0	0 0	0 0
INDIAN POINT	0 0	0 0	0 0	0 0	0 0	0 0
WEST POINT	0 0	0 0	NS	0 0	0 0	NS
CORNWALL	0 0	0 0	0 0	0 0	0 0	0 0
POUGHKEEPSIE	0 0	0 0	NS	0 0	0 0	NS
HYDE PARK	0 0	0 0	NS	0 0	0 0	NS
KINGSTON	0 0	0 0	NS	0 0	0 0	NS
SAUGERTIES	0 0	0 0	NS	0 0	0 0	NS
CATSKILL	0 0	0 0	NS	0 0	0 0	NS
ALBANY	NS	0 0	NS	NS	0 0	NS

TABLE B-103

1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR BAY ANCHOVY POST YOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 9. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST YOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	57731 38356	NS	12771	0 0	NS	0
TAPPAN ZEE	9275 2994	11872 8991	20008 8928	0 0	0 0	0 0
CRUTON-HAVERSTRAW	6218 2354	4141 2618	21487 9076	0 0	0 0	0 0
INDIAN POINT	137333 76957	4217 1560	633 285	0 0	0 0	0 0
WEST POINT	2154 1376	97 49	NS	0 0	0 0	NS
CORNWALL	0 0	0 0	0 0	0 0	0 0	0 0
POUGHKEEPSIE	0 0	0 0	NS	0 0	0 0	NS
HYDE PARK	0 0	0 0	NS	0 0	0 0	NS
KINGSTON	0 0	0 0	NS	0 0	0 0	NS
SAUGERTIES	0 0	0 0	NS	0 0	0 0	NS
CATSKILL	0 0	0 0	NS	0 0	0 0	NS
ALBANY	NS	16 16	NS	NS	0 0	NS

TABLE B-104 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR BAY ANCHOVY POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 10 STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE		YOUNG-OF-YEAR	
	CHANNEL	BOTTOM	CHANNEL	BOTTOM
YONKERS	86663 29298	NS	53173	NS
TAPPAN ZEE	494171 188792	508870 96061	927232 652171	0 0
CROTON-HAVERSTRAW	342386 47407	162968 66248	712483 388822	0 0
INDIAN POINT	458326 164697	17263 4702	30462 7685	0 0
WEST POINT	5827 938	1407 1247	NS	NS
CORNWALL	46 46	13 13	0 0	0 0
POUGHKEEPSIE	0 0	0 0	NS	NS
HYDE PARK	0 0	0 0	NS	NS
KINGSTON	0 0	0 0	NS	NS
SAUGERTIES	0 0	0 0	NS	NS
CATSKILL	0 0	0 0	NS	NS
ALBANY	NS	0 0	NS	NS

TABLE B-105 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR BAY ANCHOVY POST VOLK-SAC LARVAE AND YOUNG OF YEAR DURING RIVER RUN 11. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	POST VOLK-SAC LARVAE			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	442609 83199	NS	44026	0 0	NS	0
IAPPAN ZEE	224216 48519	188064 79515	453254 90777	0 0	0 0	0 0
CRUTON-HAVERSTRAW	36762 22070	8917 4471	24289 7012	0 0	0 0	0 0
INDIAN POINT	2869 1095	1164 884	220 95	0 0	0 0	0 0
WEST POINT	903 354	159 106	NS	0 0	0 0	NS
CORNWALL	27 27	0 0	0 0	0 0	0 0	0 0
POUGHKEEPSIE	0 0	31 31	NS	0 0	0 0	NS
HYDE PARK	0 0	0 0	NS	0 0	0 0	NS
KINGSTON	0 0	0 0	NS	0 0	0 0	NS
SAUGERTIES	0 0	0 0	NS	0 0	0 0	NS
CATSKILL	0 0	0 0	NS	0 0	0 0	NS
ALBANY	NS	0 0	NS	NS	0 0	NS

TABLE B-106 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE CATFISH YOUNG OF YEAR DURING RIVER RUNS 2 AND 3. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0		0	0		0
TAPPAN ZEE	0	0	0	0	0	0
	0		0	0		0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0		0	0		0
INDIAN POINT	0	0	0	0	0	0
	0		0	0		0
WEST POINT	0	0	NS	0	0	NS
	0			0		
CORNWALL	0	0	0	0	0	0
	0		0	0		0
POUGHKEEPSIE	0	0	NS	0	0	NS
	0			0		
HYDE PARK	0	0	NS	0	0	NS
	0			0		
KINGSTON	0	0	NS	0	0	NS
	0			0		
SAUGERTIES	0	0	NS	0	0	NS
	0			0		
CATSKILL	0	0	NS	0	0	NS
	0			0		
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-107 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE CATFISH YOUNG OF YEAR DURING RIVER RUNS 4 AND 5. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0 0	NS	0 0	0 0	NS	0 0
TAPPAN ZEE	0 0	0 0	0 0	0 0	0 0	0 0
CROTON-HAVERSTRAW	0 0	0 0	0 0	0 0	0 0	0 0
INDIAN POINT	0 0	0 0	0 0	0 0	27 27	0 0
WEST POINT	0 0	0 0	NS	0 0	0 0	NS
CORNWALL	0 0	0 0	0 0	0 0	0 0	0 0
POUGHKEEPSIE	0 0	0 0	NS	0 0	0 0	NS
HYDE PARK	0 0	0 0	NS	0 0	0 0	NS
KINGSTON	0 0	0 0	NS	0 0	0 0	NS
SAUGERTIES	0 0	0 0	NS	0 0	0 0	NS
CATSKILL	0 0	0 0	NS	0 0	0 0	NS
ALBANY	NS	0 0	NS	NS	0 0	NS

TABLE B-108 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE CATFISH YOUNG OF YEAR DURING RIVER RUNS 6 AND 7. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0	0	0	0	0	0
TAPPAN ZEE	0	0	0	0	NS	0
	0	0	0	0	0	0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0	0	0	0	0	0
INDIAN POINT	0	0	0	0	0	0
	0	0	0	0	0	0
WEST POINT	0	0	NS	0	0	NS
	0	0	0	0	0	0
CORNWALL	0	0	0	0	0	0
	0	0	0	0	0	0
POUGHKEEPSIE	0	0	NS	0	0	NS
	0	0	0	0	0	0
HYDE PARK	0	0	NS	0	0	NS
	0	0	0	0	0	0
KINGSTON	0	0	NS	0	0	NS
	0	0	0	0	0	0
SAUGERTIES	0	0	NS	0	0	NS
	0	0	0	0	0	0
CATSKILL	0	0	NS	0	0	NS
	0	0	0	0	0	0
ALBANY	NS	0	NS	NS	0	NS
	0	0	0	0	0	0

TABLE B-109
 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE CATFISH
 YOUNG OF YEAR DURING RIVER RUNS 8 AND 9. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED
 BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR		YOUNG-OF-YEAR		YOUNG-OF-YEAR	
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0					
TAPPAN ZEE	0	0	0	0	0	0
	0		0	0	0	0
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0		0	0	0	0
INDIAN POINT	0	0	0	0	0	0
	0		0	0	0	0
WEST POINT	0	0	NS	0	0	NS
	0			0	0	
CORNWALL	0	0	0	0	0	0
	0		0	0	0	0
POUGHKEEPSIE	0	0	NS	0	0	NS
	0			0	0	
HYDE PARK	0	0	NS	0	0	NS
	0			0	0	
KINGSTON	0	0	NS	0	29	NS
	0			0	29	
SAUGERTIES	0	0	NS	0	0	NS
	0			0	0	
CATSKILL	0	0	NS	0	0	NS
	0			0	0	
ALBANY	NS	0	NS	NS	0	NS
		0			0	

TABLE B-110 1984 LONGITUDINAL RIVER SURVEY STANDING CROP DATA (IN THOUSANDS) FOR WHITE CATFISH YOUNG OF YEAR DURING RIVER RUNS 10 AND 11. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR			YOUNG-OF-YEAR		
	CHANNEL	BOTTOM	SHOAL	CHANNEL	BOTTOM	SHOAL
YONKERS	0	NS	0	0	NS	0
	0			0		
TAPPAN ZEE	0	0	0	0	0	0
	0			0		
CROTON-HAVERSTRAW	0	0	0	0	0	0
	0			0		
INDIAN POINT	0	0	0	0	0	0
	0			0		
WEST POINT	0	0	NS	0	0	NS
	0			0		
CORNWALL	0	0	0	0	0	0
	0			0		
POUGHKEEPSIE	0	0	NS	49	0	NS
	0			49		
HYDE PARK	0	0	NS	0	86	NS
	0			0	53	
KINGSTON	0	0	NS	0	89	NS
	0			0	57	
SAUGERTIES	0	0	NS	0	112	NS
	0			0	37	
CATSKILL	0	0	NS	291	2592	NS
	0			164	1491	
ALBANY	NS	116	NS	NS	489	NS
		31			114	

TABLE B-111 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER STRIPED BASS DURING RIVER RUN 1. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	10	10	66	0	NS	0	0	0	0	
	0		10	10	24	0		0	0	0	0	
IAPPAN ZEE	0	21	209	78	201	0	43	60	11	8	11	
	0	21	78	78	85	0	28	31	8	8	8	
CROTON-HAVERSTRAW	46	0	130	74	31	0	10	25	6	4	6	
	46	0	74	74	14	0	10	13	4	4	4	
INDIAN POINT	0	35	797	635	39	139	0	0	0	0	0	
	0	22	635	635	18	139	0	0	0	0	0	
WEST POINT	144	56	NS	NS	31	0	0	NS	1	1	1	
	144	41			27	0	0		1	1	1	
CORNWALL	0	136	238	126	66	0	0	0	2	2	2	
	0	88	126	126	21	0	0	0	2	2	2	
POUGHKEEPSIE	0	68	NS	NS	37	0	0	NS	0	0	0	
	0	68			25	0	0		0	0	0	
HYDE PARK	106	203	NS	NS	23	0	0	NS	0	0	0	
	106	102			14	0	0		0	0	0	
KINGSTON	150	81	NS	NS	17	0	10	NS	3	3	3	
	150	47			15	0	10		3	3	3	
SAUGERTIES	0	53	NS	NS	38	0	0	NS	2	2	2	
	0	20			22	0	0		2	2	2	
CATSKILL	0	265	NS	NS	110	0	7	NS	4	4	4	
	0	136			70	0	7		3	3	3	
ALBANY	NS	9	NS	NS	4	NS	0	NS	41	41	41	
		6			3		0		25	25	25	

TABLE B-112 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER STRIPED BASS DURING RIVER RUN 2. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	20	20	163	60	0	NS	0	0	0	
	0		20	20	60		0		0	0	0	
IAPPAN ZEE	0	122	2255	240	240	35	0	72	35	2	2	
	0	122	1030	43	43	26	0	51	26	2	2	
CROTON-HAVERSTRAW	0	23	995	215	215	0	0	24	0	0	0	
	0	15	211	59	59	0	0	24	0	0	0	
INDIAN POINT	0	172	1885	54	54	0	0	0	0	0	0	
	0	114	484	20	20	0	0	0	0	0	0	
WEST POINT	177	25	NS	5	5	0	0	0	NS	0	0	
	177	15		4	4	0	0	0		0	0	
CORNWALL	127	807	296	37	37	0	0	0	0	0	0	
	127	492	86	17	17	0	0	0	0	0	0	
POUGHKEEPSIE	205	0	NS	23	23	1	0	0	NS	1	1	
	205	0		18	18	1	0	0		1	1	
HYDE PARK	101	27	NS	2	2	0	0	0	NS	0	0	
	101	17		1	1	0	0	0		0	0	
KINGSTON	0	36	NS	3	3	0	0	0	NS	0	0	
	0	14		3	3	0	0	0		0	0	
SAUGERTIES	0	88	NS	49	49	0	0	40	NS	0	0	
	0	41		28	28	0	0	19		0	0	
CATSKILL	0	51	NS	55	55	0	0	6	NS	0	0	
	0	15		53	53	0	0	6		0	0	
ALBANY	NS	25	NS	2	2	0	NS	0	NS	10	10	
		15		2	2	0		0		6	6	

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TABLE B-113 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER STRIPED BASS DURING RIVER RUN 3. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	92	28	75	34	0	NS	0	0	0	
TAPPAN ZEE	0	454	67	29	290	71	0	0	12	12	8	
CRUTON-HAVERSTRAW	0	12	358	145	384	148	0	11	0	0	0	
INDIAN POINT	0	38	126	49	11	7	0	0	6	6	0	
WEST POINT	0	0	NS	NS	56	22	0	0	NS	NS	0	
CORNWALL	0	122	329	137	73	50	100	0	0	0	0	
POUGHKEEPSIE	0	0	NS	NS	3	3	0	0	NS	NS	0	
HYDE PARK	109	18	NS	NS	< 0.5	< 0.5	0	0	NS	NS	< 0.5	
KINGSTON	0	114	NS	NS	38	26	0	0	NS	NS	0	
SAUGERTIES	131	98	NS	NS	55	21	0	0	NS	NS	4	
CAISKILL	0	14	NS	NS	116	53	0	0	NS	NS	6	
ALBANY	NS	13	NS	NS	0	0	NS	0	NS	NS	0	

TABLE B-114 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER STRIPED BASS DURING RIVER RUN 4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	27	36	16	0	NS	0	0	0	0	
TAPPAN ZEE	0	558	117	242	68	0	18	0	0	2	2	
CRUTON HAVERSTRAW	72	68	179	415	104	0	0	0	0	2	2	
INDIAN POINT	0	113	6	105	38	0	0	0	0	0	0	
WEST POINT	0	13	NS	4	2	0	0	0	NS	0	0	
CORNWALL	0	19	152	5	2	0	0	0	0	0	0	
POUGHKEEPSIE	0	0	NS	3	2	0	0	0	NS	0	0	
HYDE PARK	210	56	NS	< 0.5	7	0	13	NS	NS	< 0.5	< 0.5	
KINGSTON	0	53	NS	7	7	0	0	0	NS	0	0	
SAUGERTIES	0	95	NS	18	10	92	0	0	NS	0	0	
CATSKILL	0	8	NS	43	37	0	0	0	NS	0	0	
ALBANY	NS	5	NS	2	2	NS	0	0	NS	0	0	

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TABLE B-115 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER STRIPED BASS DURING RIVER RUN 5. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE
YONKERS	0	NS	40	27	21	9	0	NS	0	0	0	5
TAPPAN ZEE	0	0	515	1246	176	621	0	0	0	0	0	6
CROTON HAVEN STRAW	0	335	9	1531	9	733	0	0	0	0	0	0
INDIAN POINT	0	153	0	70	0	34	0	0	0	0	0	0
WEST POINT	0	0	NS	12	NS	4	0	0	0	NS	NS	2
CORNWALL	0	0	0	69	0	26	0	0	0	0	0	0
POUGHKEEPSIE	0	33	NS	3	NS	3	0	0	0	NS	NS	1
HYDE PARK	0	0	NS	< 0.5	NS	< 0.5	0	0	0	NS	NS	0
KINGSTON	0	0	NS	2	NS	2	0	0	0	NS	NS	0
Saugerties	0	47	NS	6	NS	4	0	0	0	NS	NS	0
Catskill	0	0	NS	2	NS	2	0	0	0	NS	NS	0
ALBANY	NS	0	NS	4	NS	3	NS	0	0	NS	NS	0

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TABLE B-116 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER STRIPED BASS DURING RIVER RUN 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE
YONKERS	0	NS	36	21	59	34	0	NS	7	7	0	0
TAPPAN ZEE	134	149	597	158	367	82	0	0	25	14	2	2
CROTON HAVENSTRAW	0	203	178	79	257	94	0	0	9	9	0	0
INDIAN POINT	185	28	0	0	114	53	0	0	0	0	0	0
WEST POINT	337	0	NS	NS	6	2	0	0	NS	NS	0	0
CORNWALL	0	0	42	19	41	26	95	0	4	4	2	2
Poughkeepsie	0	56	NS	NS	7	7	0	29	NS	NS	0	0
HYDE PARK	0	0	NS	NS	0	0	0	0	NS	NS	0	0
KINGSTON	0	53	NS	NS	0	0	0	8	NS	NS	0	0
SAUGERTIES	74	120	NS	NS	8	4	0	0	NS	NS	2	2
LATSKILL	0	0	NS	NS	4	3	0	7	NS	NS	0	0
ALBANY	NS	0	NS	NS	4	4	NS	0	NS	NS	0	0

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TABLE B-117 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER STRIPED BASS DURING RIVER RUN 7. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHORE	SHOAL	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	0	23	0	17	0	NS	0	0	0	
TAPPAN ZEE	0	88	99	481	0	222	0	0	0	0	0	
CROTON-HAVERSTRAW	0	53	9	515	9	159	0	0	0	0	2	
INDIAN POINT	193	35	0	92	0	0	0	0	0	0	0	
WEST POINT	172	0	NS	10	NS	4	0	0	NS	0	0	
CORNWALL	0	0	9	7	9	4	0	0	0	0	4	
POUGHKEEPSIE	0	0	NS	7	NS	7	0	0	NS	0	4	
HYDE PARK	0	0	NS	0	NS	0	0	0	NS	0	0	
KINGSTON	0	0	NS	0	NS	0	0	0	NS	0	0	
SAUGERTIES	0	9	NS	2	NS	2	0	0	NS	0	0	
CATSKILL	0	0	NS	0	NS	0	0	0	NS	0	0	
ALBANY	NS	0	NS	0	NS	0	NS	0	NS	0	0	

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TABLE B-11B 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER STRIPED BASS DURING RIVER RUN B. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	243	18	0	0	0	NS	10	10	2	
	0		97	9			0		10		2	
IAPPAN ZEE	0	703	1132	195	0	0	0	0	22	0	0	
	0	360	230	50	0	0	0	0	15	0	0	
CROTUN-HAVERSTRAW	0	164	0	223	0	0	0	0	0	0	6	
	0	47	0	61	0	0	0	0	0	0	6	
INDIAN POINT	0	0	0	31	0	0	0	0	0	0	0	
	0	0	0	23	0	0	0	0	0	0	0	
WEST POINT	0	0	NS	5	0	0	0	0	NS	1	1	
	0	0		3	0	0	0					
CORNWALL	0	77	90	14	0	0	0	0	4	0	0	
	0	77	36	5	0	0	0	0	4	0	0	
POUGHKEEPSIE	297	340	NS	16	0	0	297	0	NS	0	0	
	297	340		8	0	0	297	0		0	0	
HYDE PARK	0	0	NS	3	0	0	0	0	NS	0	0	
	0	0		3	0	0	0	0		0	0	
KINGSTON	0	0	NS	7	0	0	0	0	NS	0	0	
	0	0		5	0	0	0	0		0	0	
SAUGERTIES	0	9	NS	2	0	0	0	0	NS	0	0	
	0	9		2	0	0	0	0		0	0	
CATSKILL	0	7	NS	4	0	0	0	0	NS	0	0	
	0	7		4	0	0	0	0		0	0	
ALBANY	NS	5	NS	2	0	0	NS	0	NS	0	0	
		5		2	0	0		0		0	0	

TABLE B-119 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER WHITE PERCH DURING RIVER RUN 1. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	20	20	0	0	0	NS	163	0	0	
	0		20	20	0	0	0		79	0	0	
TAPPAN ZEE	0	21	10	10	13	13	0	403	3769	820	820	
	0	21	10	10	9	9	0	268	640	169	169	
CROTON-HAVERSTRAW	0	0	0	0	10	10	0	126	273	417	417	
	0	0	0	0	6	6	0	61	126	123	123	
INDIAN POINT	0	0	0	0	35	35	0	36	28	223	223	
	0	0	0	0	19	19	0	36	16	91	91	
WEST POINT	142	28	NS	NS	11	11	0	14	NS	14	14	
	142	17			6	6	0	14		9	9	
CORNWALL	80	197	30	30	11	11	0	0	204	187	187	
	80	92	24	24	11	11	0	0	175	90	90	
POUGHKEEPSIE	694	104	NS	NS	150	150	0	68	NS	23	23	
	165	42			92	92	0	42		11	11	
HYDE PARK	2318	1369	NS	NS	53	53	0	245	NS	7	7	
	1499	642			31	31	0	125		5	5	
KINGSTON	444	340	NS	NS	5	5	1579	824	NS	40	40	
	214	146			3	3	920	105		27	27	
SAUGERTIES	0	26	NS	NS	71	71	126	655	NS	239	239	
	0	14			52	52	79	144		97	97	
CATSKILL	0	213	NS	NS	279	279	89	440	NS	386	386	
	0	89			110	110	56	71		203	203	
ALBANY	NS	5	NS	NS	0	0	NS	81	NS	301	301	
		5			0	0		30		89	89	

TABLE B-120 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER WHITE PERCH DURING RIVER RUN 2. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	0	0	0	0	0	NS	37	21	21	
	0		0	0	0	0	0		20	16	16	
TAPPAN ZEE	0	0	291	129	51	51	0	494	7237	598	598	
	0	0	280	51			0	332	1165	155	155	
CROTON HAVERSTRAW	0	0	19	125	53	53	0	161	382	582	582	
	0	0	13	53			0	55	73	125	125	
INDIAN POINT	0	19	12	22	22	22	0	387	91	143	143	
	0	19	8	22	22	22	0	275	15	65	65	
WEST POINT	177	0	NS	32	23	23	178	68	NS	5	5	
	177	0		23			178	22		4	4	
CORNWALL	0	81	28	0	0	0	255	145	323	91	91	
	0	39	23	0	0	0	255	90	160	30	30	
POUGHKEEPSIE	0	206	NS	67	52	52	1375	32	NS	34	34	
	0	123		52			1375	32		31	31	
HYDE PARK	705	251	NS	5	3	3	404	256	NS	< 0.5	< 0.5	
	476	91		3			286	36		< 0.5	< 0.5	
KINGSTON	243	74	NS	72	40	40	268	531	NS	0	0	
	243	41		40			161	272		0	0	
SAUGERTIES	0	48	NS	41	28	28	204	900	NS	43	43	
	0	39		28			140	238		24	24	
CATSKILL	0	0	NS	20	10	10	382	495	NS	120	120	
	0	0		10			243	126		47	47	
ALBANY	NS	4	NS	2	2	2	NS	394	NS	118	118	
		4		2	2	2		112		59	59	

TABLE B-121 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER WHITE PERCH DURING RIVER RUN 3. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	0	0	5	5	0	NS	24	NS	24	8
	0		0	0	5	5	0		24		24	6
TAPPAN ZEE	0	0	0	0	127	44	0	324	970	252	242	468
	0	0	0	0	44	127	0	252	970	242	242	127
CROTON-HAVERSTRAW	0	0	0	0	100	40	0	433	175	155	43	177
	0	0	0	0	40	100	0	155	175	43	43	80
INDIAN POINT	0	0	6	6	15	4	0	738	38	446	14	7
	0	0	6	6	4	15	0	446	38	14	14	5
WEST POINT	0	0	NS	NS	40	31	0	16	NS	16	NS	10
	0	0	NS	NS	31	40	0	16	NS	16	NS	4
CORNWALL	0	21	8	8	46	46	0	167	795	109	436	91
	0	21	5	5	46	46	0	109	795	436	436	38
POUGHKEEPSIE	0	103	NS	NS	20	16	508	380	NS	172	NS	3
	0	68	NS	NS	16	20	254	172	NS	172	NS	3
HVDE PARK	216	642	NS	NS	7	4	761	412	NS	109	NS	7
	125	327	NS	NS	4	7	627	109	NS	109	NS	3
KINGSTON	0	92	NS	NS	53	25	49	1041	NS	321	NS	90
	0	66	NS	NS	25	53	49	321	NS	321	NS	64
SAUGERTIES	0	10	NS	NS	205	59	59	909	NS	238	NS	136
	0	10	NS	NS	59	205	59	238	NS	238	NS	56
CATSKILL	0	0	NS	NS	73	47	42	351	NS	75	NS	41
	0	0	NS	NS	47	73	42	75	NS	75	NS	29
ALBANY	NS	0	NS	NS	12	12	NS	212	NS	34	NS	78
	NS	0	NS	NS	12	12	NS	34	NS	34	NS	75

TABLE B-122 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER WHITE PERCH DURING RIVER RUN 4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE
YONKERS	0	NS	0	0	2	2	0	NS	28	3	0	3
	0		0	0	2	2	0		13	2		2
TAPPAN ZEE	0	18	0	0	114	114	0	163	652	986	0	986
	0	18	0	0	47	47	0	69	366	452	0	452
CROTON-HAVERSTRAW	0	0	19	13	1001	789	0	156	68	267	0	267
	0	0	0	0	0	0	0	66	31	136	0	136
INDIAN POINT	0	0	0	0	70	70	0	18	6	74	0	74
	0	0	0	0	32	32	0	18	6	56	0	56
WEST POINT	0	0	NS	NS	31	31	0	0	NS	4	0	4
	0	0			23	23	0	0		3	0	3
CORNWALL	0	19	56	56	0	0	0	0	124	23	0	23
	0	19	20	20	0	0	0	0	31	15	0	15
POUGHKEEPSIE	240	141	NS	NS	4	4	731	314	NS	14	0	14
	240	67			4	4	416	137		10	0	10
HYDE PARK	0	73	NS	NS	2	2	0	568	NS	3	0	3
	0	57			1	1	0	181		2	0	2
KINGSTON	0	0	NS	NS	12	12	53	531	NS	21	0	21
	0	0			10	10	53	166		12	0	12
SAUGERTIES	0	63	NS	NS	4	4	156	1334	NS	4	0	4
	0	33			4	4	101	657		3	0	3
CAISKILL	0	7	NS	NS	14	14	0	425	NS	30	0	30
	0	7			12	12	0	99		24	0	24
ALBANY	NS	0	NS	NS	10	10	NS	156	NS	21	NS	21
		0			8	8		42		11		11

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TABLE B-123 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER WHITE PERCH DURING RIVER RUN 5. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YUNKERS	0	NS	0	0	0	0	0	NS	52	12	0	
	0	0	0	0	0	0	0	0	26	10	0	
IAPPAN ZEE	0	0	0	134	53	0	0	101	2288	214	0	
	0	0	0	0	0	0	0	43	605	66	0	
CROTON-HAVERSTRAW	0	0	0	194	87	0	0	71	0	1642	0	
	0	0	0	0	0	0	0	29	0	1116	0	
INDIAN POINT	0	0	0	33	14	0	0	0	6	98	0	
	0	0	0	0	0	0	0	0	6	82	0	
WEST POINT	0	0	NS	88	42	0	0	13	NS	12	0	
	0	0	0	0	0	0	0	13	NS	6	0	
CORNWALL	0	18	0	96	23	0	0	128	46	46	0	
	0	18	0	0	0	0	0	64	20	20	0	
POUGHKEEPSIE	0	98	NS	4	4	0	0	391	NS	33	0	
	0	40	0	0	0	0	0	210	NS	18	0	
HYDE PARK	99	70	NS	3	2	0	790	191	NS	5	0	
	99	70	0	0	0	0	790	62	NS	3	0	
KINGSTON	0	40	NS	10	10	0	49	316	NS	14	0	
	0	22	0	0	0	0	49	84	NS	10	0	
SAUGERTIES	0	10	NS	49	47	0	0	409	NS	55	0	
	0	10	0	0	0	0	0	110	NS	29	0	
CATSKILL	0	0	NS	31	18	0	0	295	NS	73	0	
	0	0	0	0	0	0	0	48	NS	43	0	
ALBANY	NS	0	NS	0	0	0	NS	171	NS	0	0	
	0	0	0	0	0	0	0	51	NS	0	0	

TABLE B-124 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER WHITE PERCH DURING RIVER RUN 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	0	0	3	3	0	NS	175	18	18	
	0		0	0	3	3	0		90	13	13	
JAPPAN ZEE	0	0	0	0	172	172	0	190	785	358	358	
	0	0	0	0	64	64	0	66	219	151	151	
CRUTON HAVERSTRAW	0	0	0	0	123	123	77	123	704	240	240	
	0	0	0	0	43	43	77	89	120	76	76	
INDIAN POINT	0	15	0	0	253	253	0	107	0	588	588	
	0	15	0	0	253	253	0	67	0	538	538	
WEST POINT	0	0	NS	NS	47	47	0	25	NS	11	11	
	0	0			22	22	0	16		7	7	
CORNWALL	0	54	15	15	41	41	0	41	316	96	96	
	0	38	7	7	26	26	0	27	81	58	58	
POUGHKEEPSIE	293	90	NS	NS	6	6	618	745	NS	13	13	
	293	61			3	3	309	628		11	11	
HYDE PARK	225	9	NS	NS	2	2	1235	182	NS	3	3	
	130	9			2	2	515	73		1	1	
KINGSTON	317	76	NS	NS	3	3	1514	1161	NS	5	5	
	211	37			3	3	1390	531		5	5	
HAUGHERIES	0	66	NS	NS	16	16	258	628	NS	38	38	
	0	34			8	8	166	234		28	28	
CATSKILL	0	0	NS	NS	92	92	0	325	NS	14	14	
	0	0			90	90	0	44		10	10	
ALBANY	NS	0	NS	NS	2	2	NS	83	NS	41	41	
		0			2	2		26		34	34	

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TABLE B-125 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER WHITE PERCH DURING RIVER RUN 7. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR				YEARLING AND OLDER			
	FALL SHOALS		BEACH SEINE		FALL SHOALS		BEACH SEINE	
	CHANNEL	BOTTOM	SHOAL	SHORE	CHANNEL	BOTTOM	SHOAL	SHORE
YONKERS	0	NS	0	0	0	NS	653	3
	0		0	0	0		100	3
TAPPAN ZEE	0	0	11	23	0	95	1119	27
	0	0	11	10	0	53	415	16
CROTON-HAVERSTRAW	0	0	0	129	0	64	102	6
	0	0	0	52	0	26	37	4
INDIAN POINT	0	0	6	90	386	173	34	35
	0	0	6	88	386	134	12	24
WEST POINT	0	0	NS	37	0	28	NS	21
	0	0		29	0	17		15
CORNWALL	0	0	13	25	102	93	141	50
	0	0	5	17	102	41	64	22
POUGHKEEPSIE	0	393	NS	9	1894	829	NS	3
	0	252		9	1046	507		2
HYDE PARK	0	131	NS	0	189	270	NS	< 0.5
	0	84		0	189	101		< 0.5
KINGSTON	214	8	NS	0	2022	796	NS	7
	214	8		0	1491	371		5
SAUGERTIES	0	9	NS	12	66	1016	NS	10
	0	9		12	66	572		8
CATSKILL	0	0	NS	20	42	302	NS	12
	0	0		16	42	53		12
ALBANY	NS	0	NS	0	NS	59	NS	6
		0		0		28		3

TABLE B-126 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER WHITE PERCH DURING RIVER RUN 8. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	0	0	0	0	0	NS	329	6	2	
	0		0	0	0	0	0		111			
IAPPAN ZEE	0	0	0	44	20	44	0	185	8991	252	140	
	0	0	0	20	0	20	0	97	1774	140		
CROTON-HAVERSTRAW	0	0	0	13	8	13	0	45	126	94	39	
	0	0	0	8	0	8	0	34	52	39		
INDIAN POINT	0	0	0	4	4	4	0	17	5	2	2	
	0	0	0	4	0	4	0	17	5	2	2	
WEST POINT	0	0	NS	35	15	35	0	0	NS	14	13	
	0	0		15		15	0	0				
CORNWALL	0	19	309	14	5	14	0	41	74	44	25	
	0	19	82	5	0	5	0	25	15	25		
POUGHKEEPSIE	297	102	NS	3	3	3	3020	0	NS	17	6	
	297	68		3		3	2332	0				
HYDE PARK	0	295	NS	7	7	7	0	251	NS	5	1	
	0	166		7		7	0	71				
KINGSTON	0	60	NS	0	0	0	47	533	NS	19	13	
	0	60		0		0	47	159				
SAUGERTIES	0	84	NS	4	4	4	65	738	NS	14	6	
	0	41		4		4	65	207				
CAISKILL	0	90	NS	2	2	2	0	616	NS	18	9	
	0	42		2		2	0	218				
ALBANY	NS	0	NS	0	0	0	NS	64	NS	23	15	
								23				

TABLE B-127 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER AMERICAN SHAD DURING RIVER RUN 1. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	0	0	6	0	0	NS	0	0	0	
	0		0	0	3	0	0		0	0	0	
TAPPAN ZEE	0	21	0	0	239	0	0	0	0	0	0	
	0	21	0	0	81	0	0	0	0	0	0	
CROTON-HAVERSTRAW	103	0	42	20	171	42	0	0	0	0	0	
	103	0	20	20	42	42	0	0	0	0	0	
INDIAN POINT	144	17	22	17	18	18	0	0	0	0	0	
	144	17	17	17	10	10	0	0	0	0	0	
WEST POINT	151	45	NS	NS	14	14	0	0	NS	NS	0	
	151	31			7	7	0	0			0	
CORNWALL	224	100	16	16	126	126	0	0	0	0	0	
	125	77	10	10	45	45	0	0	0	0	0	
HUGHBURYS	2237	209	NS	NS	389	389	0	0	NS	NS	0	
	1971	102			80	80	0	0			0	
HVDE PARK	1328	268	NS	NS	50	50	0	0	NS	NS	0	
	97	51			34	34	0	0			0	
KINGSTON	1133	766	NS	NS	19	19	0	0	NS	NS	0	
	443	81			19	19	0	0			0	
SAUGERTIES	1141	1172	NS	NS	340	340	0	0	NS	NS	0	
	500	173			146	146	0	0			0	
CATSKILL	1036	1617	NS	NS	366	366	0	0	NS	NS	0	
	257	243			207	207	0	0			0	
ALBANY	NS	359	NS	NS	243	243	NS	0	NS	NS	0	
		177			121	121		0			0	

TABLE B-128 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER AMERICAN SHAD DURING RIVER RUN 2. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	33	11	0	0	NS	0	0	0	0	
	0		19	6		0		0		0		
TAPPAN ZEE	109	73	347	180	0	0	0	0	0	0	0	
	109	73	83	92	0	0	0	0	0	0	0	
CROTON HAVERSTRAW	0	41	259	182	0	0	0	0	0	0	0	
	0	20	41	71	0	0	0	0	0	0	0	
INDIAN POINT	160	36	67	57	0	0	0	0	0	0	0	
	160	22	11	22	0	0	0	0	0	0	0	
WEST POINT	889	0	NS	10	0	0	0	0	NS	0	0	
	472	0		4		0		0		0		
CORNWALL	255	100	32	292	0	0	0	0	0	0	0	
	255	55	15	59	0	0	0	0	0	0	0	
POUGHKEEPSIE	435	75	NS	192	0	0	0	0	NS	0	0	
	218	75		96	0	0	0	0		0	0	
HYDE PARK	504	113	NS	11	0	0	0	0	NS	0	0	
	303	27		8		0		0		0		
KINGSTON	826	160	NS	24	0	0	0	0	NS	0	0	
	508	32		16		0		0		0		
SAUGERTIES	488	590	NS	200	0	0	0	0	NS	0	0	
	275	96		75		0		0		0		
CATSKILL	606	253	NS	100	0	0	0	0	NS	0	0	
	171	58		36		0		0		0		
ALBANY	NS	122	NS	190	NS	NS	3	NS	NS	3	0	
		25		66			3			3	0	

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TABLE B-129 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER AMERICAN SHAD DURING RIVER RUN 3. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHORE	SHOAL	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	12	0	12	0	0	NS	0	0	0	
TAPPAN ZEE	0	60	119	125	29	36	0	0	0	0	0	
CROTON-HAVERSTRAW	0	12	241	148	46	51	0	0	0	0	0	
INDIAN POINT	0	0	36	50	36	27	0	0	0	0	0	
WEST POINT	0	16	NS	32	NS	21	0	0	NS	NS	0	
CORNWALL	0	0	8	404	5	164	0	0	0	0	0	
POUGHKEEPSIE	0	34	NS	176	NS	85	0	0	NS	NS	0	
HYDE PARK	538	52	NS	24	NS	4	0	0	NS	NS	0	
KINGSTON	0	113	NS	89	NS	68	0	0	NS	NS	0	
SAUGERTIES	131	45	NS	249	NS	64	0	0	NS	NS	0	
CATSKILL	48	68	NS	110	NS	34	0	0	NS	NS	0	
ALBANY	NS	32	NS	439	NS	110	NS	NS	NS	NS	0	

TABLE B-130 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER AMERICAN SHAD DURING RIVER RUN 4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	37	13	3	3	0	NS	0	0	0	
TAPPAN ZEE	0	40	265	64	81	27	0	0	0	0	0	
CROTON-HAVERSTRAW	0	19	68	28	186	88	0	0	0	0	0	
INDIAN POINT	0	74	5	5	65	30	0	0	0	0	0	
WEST POINT	0	0	NS	NS	8	5	0	0	NS	0	0	
CORNWALL	0	38	131	35	190	61	0	0	4	4	0	
POUGHKEEPSIE	0	73	NS	NS	30	12	0	0	NS	0	0	
HYDE PARK	105	45	NS	NS	10	3	0	0	NS	0	0	
KINGSTON	62	109	NS	NS	129	102	0	0	NS	0	0	
SAUGERTIES	260	198	NS	NS	148	34	0	0	NS	0	0	
CATSKILL	0	346	NS	NS	360	125	0	0	NS	0	0	
ALBANY	NS	24	NS	NS	146	39	NS	0	NS	0	0	

TABLE B-132 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER AMERICAN SHAD DURING RIVER RUN 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	66	66	3	3	0	NS	0	0	0	
	0		29	29	2	2	0		0	0	0	
TAPPAN ZEE	0	46	121	121	51	51	0	0	0	0	0	
	0	46	49	49	21	21	0	0	0	0	0	
CROTON HAVERSTRAW	0	26	17	17	96	96	0	0	0	0	0	
	0	17	12	12	37	37	0	0	0	0	0	
INDIAN POINT	0	0	0	0	6	6	0	0	0	0	0	
	0	0	0	0	6	6	0	0	0	0	0	
WEST POINT	0	12	NS	NS	11	11	0	0	0	NS	0	
	0	12			8	8	0	0	0		0	
CORNWALL	105	29	3	3	30	30	0	29	0	0	0	
	105	18	3	3	6	6	0	18	0	0	0	
PUUGHKEEPSIE	608	62	NS	NS	105	105	0	0	NS	0	0	
	305	62			28	28	0	0		0	0	
HYDE PARK	115	21	NS	NS	3	3	115	0	NS	0	0	
	115	13			1	1	115	0		0	0	
KINGSTON	0	211	NS	NS	0	0	0	24	NS	0	0	
	0	93			0	0	0	12		0	0	
SAUGERTIES	0	239	NS	NS	67	67	0	0	NS	0	0	
	0	73			26	26	0	0		0	0	
CATSKILL	0	282	NS	NS	33	33	0	0	NS	0	0	
	0	41			20	20	0	0		0	0	
ALBANY	NS	66	NS	NS	39	39	NS	0	NS	0	0	
		15			13	13		0		0	0	

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TABLE B-133 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER AMERICAN SHAD DURING RIVER RUN 7. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHOAL	BOTTOM	SHOAL	SHOAL	BOTTOM	SHOAL	SHORE
YONKERS	0	NS	19	19	8	0	NS	0	0	0	0	0
	0		19	19	5	0		0	0	0	0	0
JAPPAN ZEE	0	135	127	45	23	0	0	0	0	0	0	0
	0	60	45		13	0	0	0	0	0	0	0
CROTON-HAVERSTRAW	0	44	17	12	15	0	0	0	0	0	0	0
	0	34	12		10	0	0	0	0	0	0	0
INDIAN POINT	386	55	0	0	13	0	0	0	0	0	0	0
	386	22	0	0	13	0	0	0	0	0	0	0
WEST POINT	0	14	NS	NS	18	0	0	0	0	NS	0	0
	0	14			12	0		0	0		0	0
CORNWALL	0	283	9	5	105	0	0	0	0	0	0	0
	0	42			50	0	0	0	0	0	0	0
POUGKEEPSIE	0	71	NS	NS	109	0	0	0	0	NS	0	0
	0	43			49	0		0	0		0	0
HYDE PARK	0	40	NS	NS	4	0	0	0	0	NS	0	0
	0	18			1	0		0	0		0	0
KINGSTON	0	121	NS	NS	3	0	0	0	0	NS	0	0
	0	80			3	0		0	0		0	0
SAUGERTIES	0	57	NS	NS	12	0	0	0	0	NS	0	0
	0	30			10	0		0	0		0	0
CATSKILL	0	29	NS	NS	30	0	0	0	0	NS	0	0
	0	13			27	0		0	0		0	0
ALBANY	NS	59	NS	NS	10	NS	NS	0	0	NS	0	0
		14			4			0	0		0	0

TABLE B-134 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER AMERICAN SHAD DURING RIVER RUN 8. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR				YEARLING AND OLDER			
	FALL SHOALS		BEACH SEINE		FALL SHOALS		BEACH SEINE	
	CHANNEL	BOTTOM	SHOAL	SHORE	CHANNEL	BOTTOM	SHOAL	SHORE
YONKERS	0	NS	154	50	0	NS	0	2
	0		41	12	0		0	2
TAPPAN ZEE	0	125	306	70	0	0	0	0
	0	80	81	24	0	0	0	0
CROTON HAVERSTRAW	0	98	0	173	0	0	0	0
	0	44	0	103	0	0	0	0
INDIAN POINT	0	51	0	0	0	0	0	0
	0	21	0	0	0	0	0	0
WEST POINT	181	58	NS	13	0	0	NS	0
	181	28		9	0	0		0
CORNWALL	0	202	104	50	0	0	0	0
	0	100	36	10	0	0	0	0
POUGHKEEPSIE	0	333	NS	23	0	0	NS	0
	0	161		11	0	0		0
HYDE PARK	0	103	NS	2	0	0	NS	0
	0	58		1	0	0		0
KINGSTON	47	142	NS	10	0	0	NS	0
	47	40		7	0	0		0
SAUGERTIES	0	122	NS	2	0	0	NS	0
	0	32		2	0	0		0
CATSKILL	0	334	NS	2	0	0	NS	0
	0	93		2	0	0		0
ALBANY	NS	27	NS	16	NS	0	NS	0
		18		9		0		0

TABLE B-135 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER ATLANTIC TOMCOD DURING RIVER RUN 1. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	1520	674	0	0	0	NS	0	0	0	
	0				0	0	0		0	0	0	
TAPPAN ZEE	483	21661	4108	989	114	54	0	0	0	0	0	
	483	8516					0	0	0	0	0	
CROTON-HAVERSTRAW	0	2977	522	343	4	3	0	0	0	0	0	
	0	785					0	0	0	0	0	
INDIAN POINT	0	1776	34	28	0	0	0	0	0	0	0	
	0	824					0	0	0	0	0	
WEST POINT	1770	2069	NS		0	0	0	0	NS	0	0	
	935	1153			0	0	0	0	0	0	0	
CORNWALL	83	80	90		0	0	0	0	0	0	0	
	83	37	90		0	0	0	0	0	0	0	
POUGHKEEPSIE	0	276	NS		0	0	0	0	NS	0	0	
	0	87			0	0	0	0	0	0	0	
HYDE PARK	0	218	NS		0	0	0	0	NS	0	0	
	0	101			0	0	0	0	0	0	0	
KINGSTON	0	10	NS		0	0	0	0	NS	0	0	
	0	10			0	0	0	0	0	0	0	
SAUGERTIES	0	9	NS		0	0	0	0	NS	0	0	
	0	9			0	0	0	0	0	0	0	
CATSKILL	0	0	NS		0	0	0	0	NS	0	0	
	0	0			0	0	0	0	0	0	0	
ALBANY	NS	0	NS		0	0	NS	0	NS	0	0	
		0			0	0		0	0	0	0	

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TABLE B-136 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER ATLANTIC TOMCOD DURING RIVER RUN 2. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	1099	NS	2102			3	0	NS			0	
	1099		377			2	0				0	
TAPPAN ZEE	0	5004	9790		85		0	0			0	
	0	1787	2414		36		0	0			0	
CROTON-HAVERSTRAW	0	3074	92		0		0	0			0	
	0	862	44		0		0	0			0	
INDIAN POINT	523	5060	31		0		0	0			0	
	315	2650	12		0		0	0			0	
WEST POINT	2506	7682	NS		0		0	0		NS	0	
	718	2830			0		0	0			0	
CORNWALL	255	1258	61		0		0	0			0	
	255	234	56		0		0	0			0	
POUGHKEEPSIE	0	939	NS		0		0	0		NS	0	
	0	359			0		0	0			0	
HYDE PARK	0	206	NS		0		0	0		NS	0	
	0	100			0		0	0			0	
KINGSTON	0	217	NS		0		0	0		NS	0	
	0	143			0		0	0			0	
SAUGERTIES	69	24	NS		0		0	0		NS	0	
	69	13			0		0	0			0	
CATSKILL	0	14	NS		0		0	0		NS	0	
	0	14			0		0	0			0	
ALBANY	NS	0	NS		0		NS	0		NS	0	
		0			0			0			0	

TABLE B-137 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER ATLANTIC TOMCOD DURING RIVER RUN 3. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YUNKERS	101	NS	1189		0	0	0	NS		0	0	
	101		462		0	0	0			0	0	
TAPPAN ZEE	118	4165	3794		40	0	0	0		0	0	
	78	3528	1593		30	0	0	0		0	0	
CROTON-HAVERSTRAW	0	2216	0		0	0	0	0		0	0	
	0	691	0		0	0	0	0		0	0	
INDIAN POINT	704	3460	20		4	0	0	0		0	0	
	352	1570	20		4	0	0	0		0	0	
WEST POINT	384	3959	NS		1	0	0	0	NS		0	
	384	1937			1	0	0				0	
CORNWALL	0	5676	384		0	0	0	0		0	0	
	0	2263	195		0	0	0	0		0	0	
POUGHKEEPSIE	0	69	NS		0	0	0	0	NS		0	
	0	42			0	0	0	0			0	
HYDE PARK	0	601	NS		0	0	0	0	NS		0	
	0	194			0	0	0	0			0	
KINGSTON	0	0	NS		0	0	0	0	NS		0	
	0	0			0	0	0	0			0	
SAUGERTIES	0	0	NS		0	0	0	0	NS		0	
	0	0			0	0	0	0			0	
CATSKILL	0	0	NS		0	0	0	0	NS		0	
	0	0			0	0	0	0			0	
ALBANY	NS	0	NS		0	0	NS		NS		0	
		0			0	0					0	

TABLE B-138 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER ATLANTIC TOMCOD DURING RIVER RUN 4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	578 484	NS	1388 438	2 2			0 0	NS	9 9	0 0		
JAPPAN ZEE	59 59	2141 1058	3216 1376	68 50			0 0	0 0	9 9	2 2		
CROTON-HAVERSTRAW	0 0	469 154	0 0	17 9			0 0	13 13	0 0	0 0		
INDIAN POINT	380 380	147 75	0 0	0 0			0 0	0 0	0 0	0 0		
WEST POINT	1206 969	380 166	NS	0 0			173 173	0 0	NS	0 0		
CORNWALL	0 0	1192 311	94 29	0 0			0 0	0 0	0 0	0 0		
POUGHKEEPSIE	0 0	649 525	NS	0 0			0 0	0 0	NS	0 0		
HYDE PARK	0 0	14 14	NS	0 0			0 0	0 0	NS	0 0		
KINGSTON	0 0	11 11	NS	0 0			0 0	0 0	NS	0 0		
SAUGERTIES	0 0	0 0	NS	0 0			0 0	0 0	NS	0 0		
CAISKILL	0 0	0 0	NS	0 0			0 0	0 0	NS	0 0		
ALBANY	NS	0 0	NS	0 0			NS	0 0	NS	0 0		

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TABLE B-139 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER ATLANTIC TOMCOD DURING RIVER RUN 5. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	346	5	5	0	0	NS	20	0	0	
	0		152	5		0			13	0		
IAPPAN ZEE	0	1449	131	27	15	0	0	20	0	2	2	
	0	881	79	15		0	0	20	0	2		
KROTON HAVERSTRAW	0	244	0	2	2	0	0	11	0	0	0	
	0	99	0	2		0	0	11	0	0		
INDIAN POINT	168	188	0	0	0	0	0	0	0	0	0	
	168	71	0	0		0	0	0	0	0		
WEST POINT	0	326	NS	0	0	0	0	0	NS	0	0	
	0	49		0		0	0	0		0		
CORNWALL	0	971	0	0	0	0	0	0	0	0	0	
	0	473	0	0		0	0	0	0	0		
POUGHKEEPSIE	0	1077	NS	0	0	0	0	0	NS	0	0	
	0	411		0		0	0	0		0		
HYDE PARK	0	82	NS	0	0	0	0	0	NS	0	0	
	0	42		0		0	0	0		0		
KINGSTON	0	198	NS	0	0	0	0	0	NS	0	0	
	0	138		0		0	0	0		0		
SAUGERTIES	0	37	NS	0	0	0	0	0	NS	0	0	
	0	21		0		0	0	0		0		
CAISKILL	0	7	NS	0	0	0	0	0	NS	0	0	
	0	7		0		0	0	0		0		
ALBANY	NS	0	NS	0	0	0	NS	0	NS	0	0	
		0		0				0		0		

TABLE B-14U 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER ATLANTIC TOMCOD DURING RIVER RUN 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	76	NS	648	6	6	0	76	NS	15	15	0	
	76		139	4	4	0	76		15	15	0	
TAPPAN ZEE	67	100	163	27	27	0	0	0	0	0	0	
	67	50	86	14	14	0	0	0	0	0	0	
CRUJON-HAVERSTRAW	0	150	9	0	0	0	0	13	0	0	0	
	0	57	9	0	0	0	0	13	0	0	0	
INDIAN POINT	0	603	0	6	6	0	0	15	0	0	0	
	0	327	0	6	6	0	0	15	0	0	0	
WEST POINT	543	214	NS	0	0	0	0	0	NS	NS	0	
	543	72		0	0	0	0	0			0	
CORNWALL	0	510	37	0	0	0	0	0	0	0	0	
	0	338	17	0	0	0	0	0	0	0	0	
POUGHKEEPSIE	887	28	NS	0	0	0	0	0	NS	NS	0	
	507	28		0	0	0	0	0			0	
HYDE PARK	0	132	NS	0	0	0	0	0	NS	NS	0	
	0	26		0	0	0	0	0			0	
KINGSTON	0	142	NS	0	0	0	0	0	NS	NS	0	
	0	49		0	0	0	0	0			0	
SAUGERTIES	0	142	NS	0	0	0	0	0	NS	NS	0	
	0	67		0	0	0	0	0			0	
CATSKILL	0	28	NS	0	0	0	0	0	NS	NS	0	
	0	16		0	0	0	0	0			0	
ALBANY	NS	0	NS	0	0	0	NS	0	NS	NS	0	
		0		0	0	0		0			0	

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TABLE B-141 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER ATLANTIC TOMCOD DURING RIVER RUN 7. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR				YEARLING AND OLDER			
	FALL SHOALS		BEACH SEINE		FALL SHOALS		BEACH SEINE	
	CHANNEL	BOTTOM	SHOAL	SHORE	CHANNEL	BOTTOM	SHOAL	SHORE
YONKERS	0	NS	1861	2	0	NS	45	0
	0		512	2	0		23	0
TAPPAN ZEE	0	357	84	6	0	0	0	0
	0	124	67	3	0	0	0	0
CROTON-HAVERSTRAW	60	113	0	2	0	0	0	0
	60	57	0	2	0	0	0	0
INDIAN POINT	0	177	0	4	0	0	0	0
	0	113	0	4	0	0	0	0
WEST POINT	172	915	NS	0	0	15	NS	0
	172	258		0	0	15		0
CORNWALL	0	452	26	0	0	0	0	0
	0	101	21	0	0	0	0	0
POUGHKEEPSIE	0	1075	NS	0	0	0	NS	0
	0	554		0	0	0		0
HYDE PARK	0	164	NS	0	0	0	NS	0
	0	61		0	0	0		0
KINGSTON	101	464	NS	0	0	0	NS	0
	64	170		0	0	0		0
SAUGERTIES	0	107	NS	0	0	0	NS	0
	0	72		0	0	0		0
CATSKILL	0	14	NS	0	0	0	NS	0
	0	9		0	0	0		0
ALBANY	NS	0	NS	0	NS	0	NS	0
		0		0		0		0

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TABLE B-142 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER ATLANTIC TOMCOD DURING RIVER RUN B. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE
YONKERS	0	NS	266	0	0	0	0	NS	21	0	0	0
	0		69	0	0	0	0		14	0	0	0
TAPPAN ZEE	0	199	486	13	8	13	0	61	69	0	0	0
	0	89	105	8	8	8	0	43	40	0	0	0
CROTON-HAVERSTRAW	0	101	8	6	6	6	0	23	0	0	0	0
	0	44	8	6	6	6	0	23	0	0	0	0
INDIAN POINT	0	136	0	2	2	2	0	0	0	0	0	0
	0	77	0	2	2	2	0	0	0	0	0	0
WEST POINT	727	128	NS	0	0	0	0	0	NS	0	0	0
	478	26		0	0	0	0	0		0	0	0
CORNWALL	0	125	74	0	0	0	0	0	0	0	0	0
	0	62	23	0	0	0	0	0	0	0	0	0
POUGHKEEPSIE	0	802	NS	0	0	0	0	0	NS	0	0	0
	0	365		0	0	0	0	0		0	0	0
HYDE PARK	0	89	NS	0	0	0	0	0	NS	0	0	0
	0	33		0	0	0	0	0		0	0	0
KINGSTON	0	133	NS	0	0	0	0	10	NS	0	0	0
	0	48		0	0	0	0	10		0	0	0
SAUGERTIES	0	68	NS	0	0	0	0	0	NS	0	0	0
	0	50		0	0	0	0	0		0	0	0
CATSKILL	0	139	NS	0	0	0	0	0	NS	0	0	0
	0	57		0	0	0	0	0		0	0	0
ALBANY	NS	0	NS	0	0	0	NS	0	NS	0	0	0
		0		0	0	0		0		0	0	0

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TABLE B-143 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER BLUEBACK HERRING DURING RIVER RUN 1. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHORE	SHOAL	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	0	0	0	0	0	NS	0	0	0	
TAPPAN ZEE	0	0	0	0	0	0	0	0	0	0	0	
CROTON-HAVERSTRAW	0	0	0	2	2	0	0	0	0	0	13	
INDIAN POINT	0	0	0	0	0	0	0	0	0	0	9	
WEST POINT	0	0	NS	177	121	0	0	0	NS	0	0	
CORNWALL	0	20	0	37	0	0	0	0	0	0	0	
POUGHKEEPSIE	0	42	NS	389	159	0	0	0	NS	0	0	
HYDE PARK	106	128	NS	258	167	0	0	0	NS	0	0	
KINGSTON	484	973	NS	352	325	0	0	0	NS	0	0	
SAUGERTIES	63	1750	NS	28	14	0	0	0	NS	0	0	
GATSKILL	768	3344	NS	394	232	0	0	0	NS	0	0	
ALBANY	NS	462	NS	116	62	NS	NS	0	NS	0	0	

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TABLE B-144 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER BLUEBACK HERRING DURING RIVER RUN 2. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR				YEARLING AND OLDER			
	FALL SHOALS		BEACH SEINE		FALL SHOALS		BEACH SEINE	
	CHANNEL	BOTTOM	SHOAL	SHORE	CHANNEL	BOTTOM	SHOAL	SHORE
YONKERS	0	NS	0	0	0	NS	0	0
	0		0	0	0		0	0
TAPPAN ZEE	0	0	0	21	0	0	0	0
	0	0	0	14	0	0	0	0
CROTON-HAVERSTRAW	0	12	108	6	0	0	0	0
	0	12	34	3	0	0	0	0
INDIAN POINT	361	31	67	140	0	0	0	0
	180	20	67	140	0	0	0	0
WEST POINT	1242	202	NS	32	0	0	NS	0
	771	59		14	0	0		0
CORNWALL	3823	3301	748	1618	0	0	0	0
	3823	878	300	743	0	0	0	0
POUGHKEEPSIE	5327	6227	NS	629	0	0	NS	0
	3027	1450		551	0	0		0
HYDE PARK	8480	4892	NS	27	0	0	NS	0
	4516	1202		19	0	0		0
KINGSTON	10083	9974	NS	558	0	0	NS	0
	8602	1551		543	0	0		0
SAUGERTIES	7304	25761	NS	689	0	0	NS	0
	1817	3970		374	0	0		0
CATSKILL	9290	10369	NS	781	0	0	NS	0
	2937	1585		533	0	0		0
ALBANY	NS	6907	NS	1283	NS	0	NS	0
		1092		570				0

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TABLE B-145 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER BLUEBACK HERRING DURING RIVER RUN 3. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	101	NS	0	0	0	0	0	NS	0	0	0	
	101		0	0	0	0	0		0	0	0	
TAPPAN ZEE	354	810	129	48	11	11	0	0	0	0	0	
	247	445	48	10	10	10	0	0	0	0	0	
GROTON-HAVERSTRAW	0	720	107	47	148	113	0	0	0	0	0	
	0	180	47		113		0	0	0	0	0	
INDIAN POINT	697	289	12	7	0	0	0	0	0	0	0	
	455	97	7		0		0	0	0	0	0	
WEST POINT	0	32	NS	NS	73	35	0	0	NS	0	0	
	0	19			35		0	0		0	0	
CORNWALL	104	262	9	9	217	132	0	0	0	0	2	
	104	234	9		132		0	0	0	0	2	
POUGHKEEPSIE	12714	7325	NS	NS	301	193	0	0	NS	0	0	
	10881	1160			193		0	0		0	0	
HYDE PARK	10633	6725	NS	NS	139	47	0	0	NS	16	0	
	3450	2128			47		0	0		16	0	
KINGSTON	961	9659	NS	NS	660	435	0	0	NS	0	0	
	258	1514			435		0	0		0	0	
SAUGERTIES	4434	6845	NS	NS	490	253	0	0	NS	0	0	
	3548	1194			253		0	0		0	0	
CATSKILL	4485	6650	NS	NS	91	40	0	0	NS	0	0	
	3349	1039			40		0	0		0	0	
ALBANY	NS	2767	NS	NS	534	335	NS	NS	NS	0	0	
		734			335					0	0	

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TABLE B-146 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER BLUEBACK HERRING DURING RIVER RUN 4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	113	0	0	0	0	NS	0	0	0	
	0		82	0	0	0	0		0	0	0	
TAPPAN ZEE	0	509	1422	8	0	0	0	0	10	0	0	
	0	172	429	6	0	0	0	0	10	0	0	
CRUTON-HAVERSTRAW	70	1119	52	288	0	0	0	0	0	0	0	
	70	533	25	182	0	0	0	0	0	0	0	
INDIAN POINT	281	301	0	184	0	0	0	0	0	0	0	
	143	159	0	119	0	0	0	0	0	0	0	
WEST POINT	0	0	NS	24	0	0	0	0	NS	0	0	
	0	0		18	0	0	0	0		0	0	
CORNWALL	0	590	76	196	0	0	0	0	0	0	0	
	0	245	41	91	0	0	0	0	0	0	0	
POUGHKEEPSIE	3123	7554	NS	121	0	0	0	0	NS	0	0	
	3123	2685		77	0	0	0	0		0	0	
HYDE PARK	5914	4696	NS	15	0	0	0	0	NS	0	0	
	5300	1204		6	0	0	0	0		0	0	
KINGSTON	7243	9144	NS	4249	0	0	0	0	NS	0	0	
	1792	1362		4103	0	0	0	0		0	0	
SAUGERTIES	10445	8771	NS	494	0	0	0	20	NS	0	0	
	7769	2029		232	0	0	0	13		0	0	
CATSKILL	695	12718	NS	584	0	0	0	0	NS	0	0	
	337	1925		299	0	0	0	0		0	0	
ALBANY	NS	4735	NS	297	NS	NS	NS	0	NS	0	0	
		1435		142				0				

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TABLE B-147 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER BLUEBACK HERRING DURING RIVER RUN 5. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	32	15	0	0	0	NS	0	0	0	
	0				0	0					0	
TAPPAN ZEE	53	96	90	66	2	2	0	0	10	10	0	
	53	58			2		0	0			0	
CROTON-HAVERSTRAW	0	160	0	0	15	15	0	0	0	0	0	
	0	52	0	0	15	15	0	0	0	0	0	
INDIAN POINT	0	198	0	0	253	253	0	0	0	0	0	
	0	51	0	0	157	157	0	0	0	0	0	
WEST POINT	372	13	NS	NS	61	61	0	0	NS	NS	0	
	372	13			28	28	0	0			0	
CORNWALL	0	670	0	0	336	336	0	0	0	0	0	
	0	175	0	0	176	176	0	0	0	0	0	
POUGHKEEPSIE	508	5586	NS	NS	13	13	0	0	NS	NS	0	
	508	1195			11	11	0	0			0	
HYDE PARK	14710	7673	NS	NS	37	37	0	0	NS	NS	0	
	11763	2817			14	14	0	0			0	
KINGSTON	658	2421	NS	NS	347	347	0	0	NS	NS	0	
	332	1042			315	315	0	0			0	
SAUGERTIES	268	977	NS	NS	186	186	0	0	NS	NS	0	
	134	471			68	68	0	0			0	
CATSKILL	0	7018	NS	NS	144	144	0	0	NS	NS	0	
	0	1461			74	74	0	0			0	
ALBANY	NS	3166	NS	NS	99	99	NS	NS	NS	NS	0	
		925			48	48		4			0	

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TABLE B-14B 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER BLUEBACK HERRING DURING RIVER RUN 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	747 458	NS	161 77	0 0	0 0	0 0	0 0	NS	0 0	0 0	0 0	
TAPPAN ZEE	0 0	28 19	201 115	2 2	2 2	0 0	0 0	0 0	0 0	0 0	0 0	
CRUTON-HAVERSTRAW	464 464	165 63	44 21	13 13	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
INDIAN POINT	588 588	134 47	15 10	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
WEST POINT	497 275	496 265	NS	39 17	0 0	0 0	0 0	0 0	NS	0 0	0 0	
CORNWALL	191 191	166 120	58 18	533 311	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
POUGHKEEPSIE	15618 6871	10868 5004	NS	128 72	0 0	0 0	0 0	0 0	NS	0 0	0 0	
RIVDE PARK	16026 8280	5422 1182	NS	224 136	0 0	0 0	0 0	11 11	NS	0 0	0 0	
KINGSTON	2938 1683	11093 4378	NS	34 34	0 0	0 0	0 0	0 0	NS	0 0	0 0	
SAUGERTIES	1762 1691	7065 1405	NS	136 84	0 0	0 0	0 0	9 9	NS	0 0	0 0	
CATSKILL	0 0	5749 719	NS	0 0	0 0	0 0	0 0	0 0	NS	0 0	0 0	
ALBANY	NS	4533 1150	NS	2 2	2 2	NS	0 0	0 0	NS	0 0	0 0	

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TABLE B-149 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER BLUEBACK HERRING DURING RIVER RUN 7. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	102	NS	64	0	0	0	0	NS	0	0	0	
	102		46	0	0	0	0		0	0	0	
TAPPAN ZEE	0	297	22	0	0	0	0	19	0	0	0	
	0	124	15	0	0	0	0	19	0	0	0	
CROTON-HAVERSTRAW	374	440	9	0	0	0	0	0	0	0	0	
	11	175	9	0	0	0	0	0	0	0	0	
INDIAN POINT	2221	1421	0	88	88	88	0	19	0	0	0	
	635	621	0	88	88	88	0	19	0	0	0	
WEST POINT	2621	201	NS	39	35	35	0	0	NS	0	0	
	1281	41					0	0		0	0	
CORNWALL	978	3699	235	2056	2056	2056	0	0	0	0	0	
	426	1668	55	1206	1206	1206	0	0	0	0	0	
POUGHKEEPSIE	10121	15255	NS	1669	816	816	0	34	NS	0	0	
	4761	6926					0	34		0	0	
HYDE PARK	5258	2144	NS	50	46	46	0	0	NS	0	0	
	3598	617					0	0		0	0	
KINGSTON	4943	5397	NS	0	0	0	0	0	NS	0	0	
	2230	1665					0	0		0	0	
SAUGERTIES	1221	2082	NS	0	0	0	0	0	NS	0	0	
	595	668					0	0		0	0	
CATSKILL	1191	2465	NS	4	4	4	0	0	NS	0	0	
	766	692					0	0		0	0	
ALBANY	NS	1505	NS	4	4	4	NS	0	NS	0	0	
		314						0		0	0	

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TABLE B-150 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER BLUEBACK HERRING DURING RIVER RUN B. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	141	NS	43	862	0	10	0	NS	10	0	0	
	141		15	626	0	10	0		10	0	0	
TAPPAN ZEE	245	742	779	68	0	0	0	0	0	0	0	
	132	308	186	40	0	0	0	0	0	0	0	
CROTON-HAVERSTRAW	0	1479	939	442	0	10	0	0	10	0	0	
	0	511	110	338	0	10	0	0	10	0	0	
INDIAN POINT	2813	634	55	0	0	0	0	0	0	0	0	
	1609	212	24	0	0	0	0	0	0	0	0	
WEST POINT	4867	1938	NS	49	0	NS	0	0	NS	0	0	
	2350	819		31	0		0	0		0	0	
CORNWALL	0	5171	1920	925	0	0	0	0	0	0	0	
	0	1665	424	404	0	0	0	0	0	0	0	
POUGHKEEPSIE	1283	10325	NS	51	0	NS	297	0	NS	0	0	
	93	2315		25	0		297	0		0	0	
HYDE PARK	0	2447	NS	28	0	NS	0	0	NS	0	0	
	0	407		16	0		0	0		0	0	
KINGSTON	421	4617	NS	101	0	NS	0	10	NS	0	0	
	290	980		101	0		0	10		0	0	
SAUGERTIES	65	4070	NS	6	0	NS	0	0	NS	0	0	
	65	1057		6	0		0	0		0	0	
CATSKILL	0	2621	NS	2	0	NS	0	8	NS	0	0	
	0	466		2	0		0	8		0	0	
ALBANY	NS	1052	NS	12	0	NS	NS	0	NS	0	0	
		349		10	0			0		0	0	

TABLE B-151 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER ALEWIFE DURING RIVER RUN 1. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE
YUNKERS	0	NS	0	0	0	0	0	NS	0	0	0	0
TAPPAN ZEE	0	0	0	0	0	0	0	0	20	4	4	4
CROTON-HAVERSTRAW	0	0	0	0	2	2	0	9	0	36	21	0
INDIAN POINT	0	0	0	0	2	2	0	18	6	0	0	0
WEST POINT	0	0	NS	NS	1	1	0	0	NS	0	0	0
CORNWALL	72	0	0	0	5	5	0	0	0	0	0	0
POUGHKEEPSIE	0	0	NS	NS	14	6	0	69	NS	0	0	0
HYDE PARK	0	80	NS	NS	11	5	0	0	NS	0	0	0
KINGSTON	387	290	NS	NS	2	2	0	30	NS	0	0	0
SAUGERTIES	0	18	NS	NS	10	8	0	0	NS	0	0	0
CATSKILL	0	0	NS	NS	30	22	0	0	NS	0	0	0
ALBANY	NS	0	NS	NS	2	2	NS	0	NS	0	0	0

TABLE B-152 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER ALEWIFE DURING RIVER RUN 2. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR				YEARLING AND OLDER			
	FALL SHOALS		BEACH SEINE		FALL SHOALS		BEACH SEINE	
	CHANNEL	BOTTOM	SHOAL	SHORE	CHANNEL	BOTTOM	SHOAL	SHORE
YONKERS	0	NS	0	0	0	NS	0	0
TAPPAN ZEE	0	0	0	0	0	0	0	0
CROTON HAVERSTRAW	0	0	0	6	0	0	0	0
INDIAN POINT	0	0	0	12	0	0	0	5
WEST POINT	0	0	NS	2	0	0	NS	0
CORNWALL	0	0	4	7	0	0	0	0
POUGHKEEPSIE	0	37	NS	13	0	0	NS	0
HYDE PARK	0	193	NS	5	0	0	NS	0
KINGSTON	194	180	NS	9	0	0	NS	0
SAUGERTIES	0	77	NS	4	0	15	NS	0
CATSKILL	0	41	NS	8	0	0	NS	0
ALBANY	NS	0	NS	4	NS	0	NS	0

TABLE B-153 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER ALEWIFE DURING RIVER RUN 3. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	0	0	0	0	0	NS	0	0	0	
	0		0	0	0	0	0		0	0	0	
TAPPAN ZEE	0	0	0	0	4	4	0	0	0	0	2	
	0		0	0	4	4	0	0	0	0	2	
CROTON-HAVERSTRAW	71	0	0	0	0	0	0	0	0	0	2	
	71		0	0	0	0	0		0	0	2	
INDIAN POINT	0	0	0	0	0	0	0	0	0	0	0	
	0		0	0	0	0	0		0	0	0	
WEST POINT	0	0	NS	NS	1	1	0	0	0	NS	0	
	0				1	1	0		0	0	0	
CORNWALL	0	0	0	0	0	0	0	0	0	0	0	
	0		0	0	0	0	0		0	0	0	
POUGHKEEPSIE	522	34	NS	NS	14	12	0	36	NS	NS	0	
	522	34			12		0	36			0	
HYDE PARK	327	0	NS	NS	9	3	218	0	NS	NS	0	
	327	0			3		126	0			0	
KINGSTON	0	310	NS	NS	0	0	0	0	NS	NS	0	
	0	80			0	0	0	0			0	
SAUGERTIES	0	28	NS	NS	36	22	0	10	NS	NS	0	
	0	15			22		0	10			0	
CATSKILL	0	23	NS	NS	0	0	0	0	NS	NS	0	
	0	16			0	0	0	0			0	
ALBANY	NS	14	NS	NS	6	6	NS	5	NS	NS	0	
		14			6	6		5			0	

TABLE B-154 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER ALEWIFE DURING RIVER RUN 4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR				YEARLING AND OLDER			
	FALL SHOALS		BEACH SEINE		FALL SHOALS		BEACH SEINE	
	CHANNEL	BOTTOM	SHOAL	SHORE	CHANNEL	BOTTOM	SHOAL	SHORE
YONKERS	0	NS	0	0	0	NS	0	0
	0		0	0	0		0	0
IAPPAN ZEE	0	0	0	0	0	0	9	0
	0		0	0	0		9	0
CRUTON-HAVERSTRAW	0	0	0	36	0	13	0	0
	0		0	33	0	13	0	0
INDIAN POINT	0	0	0	2	0	0	0	0
	0		0	2	0		0	0
WEST POINT	0	0	NS	1	0	0	NS	0
	0			1	0		0	0
CORNWALL	0	0	8	0	0	0	0	0
	0		5	0	0		0	0
POUGHKEEPSIE	0	33	NS	1	0	0	NS	0
	0	33		1	0		0	0
HYDE PARK	0	27	NS	4	0	14	NS	0
	0	27		3	0	14		0
KINGSTON	0	142	NS	0	0	23	NS	0
	0	32		0	0	15		0
SAUGERTIES	92	185	NS	4	0	11	NS	0
	92	58		4	0	11		0
CATSKILL	0	32	NS	33	0	0	NS	0
	0	19		33	0	0		0
ALBANY	NS	20	NS	0	NS	0	NS	0
		10		0		0		0

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TABLE B-155 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER ALEWIFE DURING RIVER RUN 5. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	0	0	0	0	0	NS	0	0	0	
	0		0	0	0	0	0		0	0	0	
IAPPAN ZEE	0	0	0	0	0	0	0	0	0	0	0	
	0		0	0	0	0	0		0	0	0	
CROTON-HAVERSTRAW	0	0	0	0	0	0	0	0	0	0	0	
	0		0	0	0	0	0		0	0	0	
INDIAN POINT	0	0	5	5	0	0	0	0	0	0	0	
	0		5	5	0	0	0		0	0	0	
WEST POINT	0	0	NS	NS	1	1	0	14	NS	0	0	
	0				1	1	0	14		0	0	
CORNWALL	0	0	0	0	16	16	0	0	0	0	0	
	0		0	0	16	16	0	0	0	0	0	
FOUGHKEEPSTIE	0	0	NS	NS	1	1	0	0	NS	0	0	
	0				1	1	0			0	0	
HYDE PARK	99	177	NS	NS	< 0.5	< 0.5	0	0	NS	0	0	
	99	130			< 0.5	< 0.5	0	0		0	0	
KINGSTON	0	10	NS	NS	0	0	0	10	NS	0	0	
	0	10			0	0	0	10		0	0	
SAUGERTIES	0	9	NS	NS	26	20	0	0	NS	0	0	
	0	9			20	20	0	0		0	0	
CATSKILL	0	22	NS	NS	2	2	0	0	NS	0	0	
	0	15			2	2	0	0		0	0	
ALBANY	NS	13	NS	NS	0	0	NS	0	NS	0	0	
		9			0	0		0		0	0	

TABLE B-156 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER ALEWIFE DURING RIVER RUN 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	0	0	0	0	0	NS	0	0	0	
TAPPAN ZEE	0	0	0	0	0	0	0	0	0	0	0	
CROTON-HAVERSTRAW	0	0	0	0	0	0	0	13	0	0	0	
INDIAN POINT	0	0	0	0	0	0	0	0	0	0	0	
WEST POINT	0	0	NS	1	1	0	0	0	0	NS	0	
CORNWALL	0	0	7	12	7	0	0	0	0	4	0	
POUGHKEEPSIE	0	29	NS	4	4	0	0	0	0	NS	0	
HYDE PARK	0	23	NS	2	2	0	0	0	0	NS	0	
KINGSTON	151	306	NS	0	0	0	0	0	0	NS	0	
DAUGHERTIES	0	136	NS	0	0	0	0	8	8	NS	0	
CATSKILL	0	37	NS	0	0	0	0	0	0	NS	0	
ALBANY	NS	4	NS	0	0	0	NS	0	0	NS	0	

TABLE B-157 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER ALEWIFE DURING RIVER RUN 7. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YUNKERS	0	NS	0	0	0	0	0	NS	0	0	0	
TAPPAN ZEE	0	0	0	0	0	0	0	0	11	0	0	
CROTON HAVERSTRAW	0	0	0	0	0	0	60	0	0	0	0	
INDIAN POINT	0	0	0	0	0	0	0	71	0	0	0	
WEST POINT	0	15	NS	NS	0	0	0	33	NS	0	0	
CORNWALL	0	18	4	4	0	0	0	0	0	0	0	
POUGHKEEPSIE	0	34	NS	NS	14	14	0	0	NS	1	1	
HIDE PARK	0	0	NS	NS	< 0.5	< 0.5	0	0	NS	0	0	
KINGSTON	0	53	NS	NS	0	0	0	11	NS	0	0	
SAUGERTIES	0	17	NS	NS	0	0	0	0	NS	0	0	
CATSKILL	0	12	NS	NS	0	0	0	0	NS	0	0	
ALBANY	NS	0	NS	NS	0	0	NS	0	NS	0	0	

TABLE B-158 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER ALEWIFE DURING RIVER RUN 8. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	0	0	0	0	0	NS	0	0	0	
JAPAN ZEE	0	0	11	11	0	0	0	0	11	11	0	
GROTON HAVERSTRAW	0	0	0	0	2	2	0	11	0	0	0	
INDIAN POINT	0	17	10	6	0	0	0	0	5	5	0	
WEST POINT	0	0	NS	NS	1	1	181	0	NS	0	0	
CORNWALL	0	87	4	4	0	0	0	0	0	0	0	
POUGHKEEPSIE	0	0	NS	NS	10	8	0	31	NS	0	0	
HYDE PARK	0	59	NS	NS	0	0	0	0	NS	0	0	
KINGSTON	93	21	NS	NS	0	0	0	11	NS	0	0	
SAUGERTIES	0	50	NS	NS	0	0	0	21	NS	0	0	
CATSKILL	0	32	NS	NS	0	0	0	9	NS	0	0	
ALBANY	NS	9	NS	NS	0	0	NS	0	NS	0	0	

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TABLE B-159 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER BAY ANCHOVY DURING RIVER RUN 1. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR				YEARLING AND OLDER			
	FALL SHOALS		BEACH SEINE		FALL SHOALS		BEACH SEINE	
	CHANNEL	BOTTOM	SHOAL	SHORE	CHANNEL	BOTTOM	SHOAL	SHORE
YONKERS	389 183	NS	907 605	0 0	23934 10088	NS	2664 464	1112 198
TAPPAN ZEE	2406 758	756 611	613 188	38 17	7285 1596	2586 335	11659 2432	1780 558
CROTON HAVERSTRAW	44 44	513 269	530 130	0 0	44 44	1037 448	4743 1477	117 81
INDIAN POINT	417 417	57 38	61 30	4 4	556 556	360 7	150 39	2 2
WEST POINT	0 0	0 0	NS	0 0	2041 622	286 116	NS	0 0
CORNWALL	0 0	0 0	0 0	0 0	1428 843	1007 415	208 118	0 0
POUGHKEEPSIE	0 0	69 43	NS	0 0	2073 576	730 202	NS	0 0
HYDE PARK	0 0	0 0	NS	0 0	1122 252	316 169	NS	0 0
KINGSTON	0 0	0 0	NS	0 0	1429 346	757 174	NS	0 0
SAUGERITIES	0 0	9 9	NS	0 0	64 64	9 9	NS	0 0
CATSKILL	0 0	7 7	NS	0 0	0 0	0 0	NS	0 0
ALBANY	NS	0 0	NS	0 0	NS	0 0	NS	2 2

TABLE B-160 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER BAY ANCHOVY DURING RIVER RUN 2. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	223 138	NS	157 70	0	0	0	13756 4663	NS	1358 283	193 132		
IAPPAN ZEE	6754 2247	1132 533	16083 4543	2224 1214	0	0	14313 4904	7433 1430	24955 6292	4544 4059		
CROTON-HAVERSTRAW	3761 2708	1725 265	18446 4927	6 6	0	0	7187 2574	4449 1104	24612 5285	6 4		
INDIAN POINT	3370 1158	1126 616	350 76	3 3	0	0	7981 3442	936 341	1079 152	0 0		
WEST POINT	7307 2026	398 202	NS	0	0	0	6781 1563	364 93	NS	60 60		
CORNWALL	1817 842	550 86	531 220	0	0	0	1980 1686	490 234	3799 1305	0 0		
POUGHKEEPSIE	751 751	138 64	NS	0	0	0	1027 1027	1207 741	NS	0 0		
HYDE PARK	0 0	30 19	NS	0	0	0	1426 889	45 20	NS	0 0		
KINGSTON	308 139	110 34	NS	0	0	0	97 97	10 10	NS	0 0		
SAUGERTIES	208 208	24 13	NS	0	0	0	0 0	0 0	NS	0 0		
CATSKILL	49 49	57 25	NS	6 4	0	0	0 0	0 0	NS	0 0		
ALBANY	NS	24 20	NS	0 0	0	0	NS	0 0	NS	0 0		

TABLE B-161 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER BAY ANCHOVY DURING RIVER RUN 3. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	28431	NS	1528	488	7600	NS	2637	5				
	12145		563	313	3537		569	3				
TAPPAN ZEE	30127	17026	81389	9	3681	4912	14121	23				
	10603	5511	13704	9	1565	1101	1401	14				
CROTON HAVERSTRAW	40099	18992	86746	0	644	2382	11710	0				
	8678	6418	6754	0	216	374	1322	0				
INDIAN POINT	19256	1445	1221	0	7127	1423	1097	0				
	9506	240	662	0	2509	479	196	0				
WEST POINT	7825	585	NS	6	975	378	NS	1				
	1848	239		4	376	112		1				
CORNWALL	34157	499	237	0	1560	1695	1608	0				
	24447	152	121	0	1005	339	364	0				
POUGHKEEPSIE	1745	142	NS	0	4710	972	NS	1				
	1372	66		0	3950	453		1				
HYDE PARK	1301	0	NS	0	427	0	NS	0				
	538	0		0	427	0		0				
KINGSTON	8248	1484	NS	0	100	9	NS	0				
	1889	414		0	63	9		0				
SAUGERTIES	3246	684	NS	0	0	0	NS	0				
	1860	136		0	0	0		0				
CATSKILL	48	162	NS	0	0	0	NS	0				
	48	45		0	0	0		0				
ALBANY	NS	18	NS	0	NS	0	NS	0				
		12		0		0		0				

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TABLE B-162 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER BAY ANCHOVY DURING RIVER RUN 4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	2785	NS	4267	5573	5532		6814	NS	542	36		
	5694		358				2084		136	21		
TAPPAN ZEE	48607	119923	153391	28			2568	2921	8433	0		
	13516	22065	22350	18			1194	335	1868	0		
CRUTON HAVERSTRAW	49159	23916	52918	2			1940	934	903	0		
	35038	6496	15425	2			1447	232	195	0		
INDIAN POINT	1285	453	271	6			425	377	142	0		
	308	75	154	6			224	67	71	0		
WEST POINT	1332	330	NS	3			504	391	NS	5		
	430	101		3			286	107		5		
CORNWALL	14978	3190	2567	0			233	805	2126	0		
	12013	639	605	0			233	234	681	0		
POUGHKEEPSIE	6353	789	NS	0			5130	717	NS	0		
	3315	543		0			3210	455		0		
HYDE PARK	14416	519	NS	0			1550	167	NS	0		
	3567	148		0			641	57		0		
KINGSTON	12629	1324	NS	0			778	44	NS	0		
	3533	237		0			215	23		0		
SAUGERTILES	4028	421	NS	0			65	0	NS	0		
	1034	121		0			65	0		0		
CATSKILL	4557	214	NS	0			279	0	NS	0		
	3412	65		0			228	0		0		
ALBANY	NS	557	NS	0			NS	0	NS	0		
		344		0				0		0		

TABLE B-163 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER BAY ANCHOVY DURING RIVER RUN 5. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YUNKERS	13220	NS	6497	6	6	2086	NS	144	144	2	2	
	7485		1665	4	4	1399		32	32	2	2	
TAPPAN ZEE	31106	45471	77105	850	850	638	633	967	967	0	0	
	6130	15330	7393	697	697	147	170	234	234	0	0	
CRUTON-HAVERSTRAW	9384	48594	63928	0	0	52	59	122	122	0	0	
	2952	17265	8076	0	0	52	31	37	37	0	0	
INDIAN POINT	14321	19318	6298	0	0	336	130	60	60	0	0	
	2945	17248	3013	0	0	336	44	44	44	0	0	
WEST POINT	3645	1362	NS	60	60	372	40	NS	NS	0	0	
	1912	296		57	57	372	40			0	0	
CORNWALL	21587	13542	779	5	5	106	473	782	782	0	0	
	16088	5029	76	5	5	106	170	135	135	0	0	
POUGHKEEPSIE	41284	8596	NS	1	1	254	952	NS	NS	0	0	
	39750	4972		1	1	254	426			0	0	
HYDE PARK	4212	742	NS	0	0	102	69	NS	NS	0	0	
	1812	236		0	0	102	25			0	0	
KINGSTON	2130	455	NS	0	0	401	180	NS	NS	0	0	
	717	134		0	0	183	49			0	0	
SAUGERTIES	480	91	NS	0	0	0	0	NS	NS	0	0	
	480	42		0	0	0	0			0	0	
CATSKILL	0	44	NS	0	0	0	0	NS	NS	0	0	
	0	18		0	0	0	0			0	0	
ALBANY	NS	9	NS	0	0	NS	0	NS	NS	0	0	
		6		0	0		0			0	0	

TABLE B-164 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER BAY ANCHOVY DURING RIVER RUN 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	106095	NS	5059	23	8766	NS	2350	2				
	20371		1213	23	2415		423	2				
TAPPAN ZEE	46770	35148	74489	748	1215	1317	2508	4				
	16766	3757	7785	720	307	557	467	3				
CROTON HAVERSTRAW	87697	43729	86932	194	541	207	364	0				
	46540	13246	12931	130	541	72	66	0				
INDIAN POINT	105174	7759	3632	4	779	108	19	0				
	14045	3284	1088	4	389	48	15	0				
WEST POINT	16343	7636	NS	1	1005	164	NS	0				
	1837	2850		1	268	50		0				
CORNWALL	26127	22433	2102	9	2659	674	343	0				
	6998	5073	839	6	1662	235	115	0				
POUGHKEEPSIE	31545	8089	NS	81	3037	620	NS	0				
	16012	4025		44	2578	253		0				
HYDE PARK	445	249	NS	0	428	76	NS	0				
	189	43		0	248	51		0				
KINGSTON	50	187	NS	0	0	0	NS	0				
	50	83		0	0	0		0				
SAUGERTIES	60	0	NS	2	0	0	NS	0				
	60	0		2	0	0		0				
CATSKILL	41	22	NS	0	0	0	NS	0				
	41	15		0	0	0		0				
ALBANY	NS	4	NS	2	NS	0	NS	0				
		4		2		0		0				

TABLE B-165 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER BAY ANCHOVY DURING RIVER RUN 7. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	24337 13927	NS	4666 1059	660 418	3445 1345	NS	292 103	0 0				
TAPPAN ZEE	9043 1717	16646 4790	13827 2274	45 24	598 167	159 106	674 161	0 0				
CROTON HAVERSTRAW	24425 5497	19561 3429	19547 3671	21 21	501 71	127 36	27 14	0 0				
INDIAN POINT	23920 11794	17162 7522	1134 210	6 6	978 520	124 53	40 22	0 0				
WEST POINT	4426 773	1388 362	NS	0 0	516 516	44 18	NS	0 0				
CORNWALL	14283 1051	17811 5030	4261 1146	4 2	193 97	75 19	236 43	0 0				
POUGHKEEPSIE	0 0	674 422	NS	248 248	0 0	0 0	NS	0 0				
HYDE PARK	217 125	54 17	NS	0 0	107 107	13 13	NS	0 0				
KINGSTON	0 0	0 0	NS	0 0	98 98	0 0	NS	0 0				
SAUGERTIES	0 0	0 0	NS	0 0	0 0	0 0	NS	0 0				
CATSKILL	0 0	14 10	NS	0 0	0 0	0 0	NS	0 0				
ALBANY	NS	0 0	NS	0 0	NS	0 0	NS	0 0				

TABLE B-166 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER BAY ANCHOVY DURING RIVER RUN 8. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	25668 12068	NS	6202 1903	36 23			2342 723	NS	368 81	56 44		
TAPPAN ZEE	26847 11544	21812 8236	31937 3611	1287 817			1205 584	318 137	888 146	2 2		
CROTON HAVERSTRAW	3280 1443	10806 3687	10334 1464	125 125			56 56	51 21	171 62	0 0		
INDIAN POINT	3987 544	668 115	402 75	0 0			154 154	17 17	62 31	0 0		
WEST POINT	4008 2436	3354 708	NS	3 3			362 362	100 36	NS	0 0		
CORNWALL	29856 15221	6121 1066	2254 243	4 4			197 99	65 44	0 0	0 0		
Poughkeepsie	14261 11882	4196 1150	NS	0 0			1673 1079	34 34	NS	0 0		
HYDE PARK	286 286	0 0	NS	0 0			0 0	30 19	NS	0 0		
KINGSTON	0 0	0 0	NS	0 0			0 0	0 0	NS	0 0		
SAUGERTIES	0 0	0 0	NS	0 0			0 0	0 0	NS	0 0		
CATSKILL	0 0	0 0	NS	0 0			0 0	0 0	NS	0 0		
ALBANY	NS	0	NS	0			NS	0	NS	0		

TABLE B-168 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR WEAKFISH DURING RIVER RUNS 3 AND 4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR				YOUNG-OF-YEAR			
	FALL SHOALS		BEACH SEINE		FALL SHOALS		BEACH SEINE	
	CHANNEL	BOTTOM	SHOAL	SHORE	CHANNEL	BOTTOM	SHOAL	SHORE
YONKERS	906	NS	1013	0	1564	NS	793	3
	683		84	0	462		221	2
TAPPAN ZEE	475	1152	1937	21	691	340	1111	6
	218	805	404	10	260	156	285	4
CROTON-HAVERSTRAW	356	1158	681	0	429	285	205	0
	189	276	161	0	250	82	60	0
INDIAN POINT	3509	2654	259	0	0	885	61	0
	1786	667	124	0	0	99	33	0
WEST POINT	0	144	NS	0	0	159	NS	0
	0	144		0	0	83		0
CORNWALL	0	0	4	0	0	20	21	0
	0	0	4	0	0	20	12	0
POUGHKEEPSIE	0	0	NS	0	0	0	NS	0
	0	0		0	0	0		0
HYDE PARK	0	0	NS	0	0	0	NS	0
	0	0		0	0	0		0
KINGSTON	0	0	NS	0	0	0	NS	0
	0	0		0	0	0		0
SAUGERTIES	0	0	NS	0	0	0	NS	0
	0	0		0	0	0		0
CATSKILL	0	0	NS	0	0	0	NS	0
	0	0		0	0	0		0
ALBANY	NS	0	NS	0	NS	0	NS	0
		0		0		0		0

TABLE B-169 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR OLDER WEAKFISH DURING RIVER RUNS 5 AND 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YOUNG-OF-YEAR					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	152 152	NS	121 47	0 0	0 0	0 0	229 229	NS	145 54	0 0	0 0	
TAPPAN ZEE	198 75	392 163	318 125	2 2	2 2	2 2	115 76	35 23	271 76	4 3	4 3	
CROTON-HAVERSTRAW	0 0	126 38	26 19	0 0	0 0	0 0	0 0	43 17	53 22	0 0	0 0	
INDIAN POINT	336 336	122 52	5 5	0 0	0 0	0 0	0 0	61 61	0 0	0 0	0 0	
WEST POINT	0 0	66 66	NS	0 0	0 0	0 0	0 0	36 36	NS	0 0	0 0	
CORNWALL	0 0	18 18	16 8	0 0	0 0	0 0	0 0	13 13	11 8	0 0	0 0	
POUGHKEEPSIE	0 0	0 0	NS	0 0	0 0	0 0	0 0	0 0	NS	0 0	0 0	
HYDE PARK	0 0	0 0	NS	0 0	0 0	0 0	0 0	0 0	NS	0 0	0 0	
KINGSTON	0 0	0 0	NS	0 0	0 0	0 0	0 0	0 0	NS	0 0	0 0	
SAUGERTIES	0 0	0 0	NS	0 0	0 0	0 0	0 0	0 0	NS	0 0	0 0	
CATSKILL	0 0	0 0	NS	0 0	0 0	0 0	0 0	0 0	NS	0 0	0 0	
ALBANY	NS	0 0	NS	0 0	0 0	0 0	NS	0 0	NS	0 0	0 0	

TABLE B-170 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR OLDER WEAKFISH DURING RIVER RUNS 7 AND 8. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR				YOUNG-OF-YEAR			
	FALL SHOALS		BEACH SEINE		FALL SHOALS		BEACH SEINE	
	CHANNEL	BOTTOM	SHOAL	SHORE	CHANNEL	BOTTOM	SHOAL	SHORE
YONKERS	102	NS	1238	0	0	NS	67	0
	102		286	0	0		27	0
TAPPAN ZEE	49	160	118	0	62	20	247	0
	49	45	48	0	62	20	69	0
CROTON-HAVERSTRAW	61	66	17	0	0	10	17	0
	61	23	11	0	0	10	17	0
INDIAN POINT	386	19	0	0	169	50	0	0
	386	19	0	0	169	50	0	0
WEST POINT	0	58	NS	0	169	0	NS	0
	0	27		0	169	0		0
CORNWALL	0	19	18	0	0	21	31	0
	0	19	13	0	0	21	11	0
POUGHKEEPSIE	0	0	NS	0	0	34	NS	0
	0	0		0	0	34		0
HYDE PARK	0	0	NS	0	0	0	NS	0
	0	0		0	0	0		0
KINGSTON	0	0	NS	0	0	0	NS	0
	0	0		0	0	0		0
SAUGERTIES	0	0	NS	0	0	0	NS	0
	0	0		0	0	0		0
CATSKILL	0	0	NS	0	0	0	NS	0
	0	0		0	0	0		0
ALBANY	NS	0	NS	0	NS	0	NS	0
		0		0		0		0

TABLE B-171 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER WHITE CATFISH DURING RIVER RUN 1. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE
YONKERS	0	NS	0	0	0	0	0	NS	21	0	0	0
	0		0	0	0	0	0		13	0	0	0
TAPPAN ZEE	0	0	0	0	0	0	0	0	39	9	0	0
	0		0	0	0	0	0		23	5	0	0
CROTON-HAVERSTRAW	0	0	0	0	0	0	0	0	23	0	0	0
	0		0	0	0	0	0		18	0	0	0
INDIAN POINT	0	0	0	0	0	0	0	0	0	4	0	0
	0		0	0	0	0	0		0	2	0	0
WEST POINT	0	0	NS	NS	0	0	0	0	NS	0	0	0
	0				0	0	0		0	0	0	0
CORNWALL	0	0	0	0	0	0	0	0	0	0	0	0
	0		0	0	0	0	0		0	0	0	0
POUGHKEEPSIE	0	34	NS	NS	0	0	0	0	NS	1	0	1
	0	34			0	0	0		0	1	0	1
FIVE PARK	0	0	NS	NS	0	0	0	0	NS	< 0.5	0	< 0.5
	0				0	0	0		0	< 0.5	0	< 0.5
KINGSTON	0	81	NS	NS	0	0	0	0	21	NS	0	0
	0	59			0	0	0		14	NS	0	0
SAUGERTIES	0	35	NS	NS	0	0	0	0	135	NS	0	0
	0	20			0	0	0		43	NS	0	0
CATSKILL	0	295	NS	NS	0	0	47	47	37	NS	8	8
	0	76			0	0	47	47	17	NS	8	8
ALBANY	NS	154	NS	NS	0	0	NS	NS	16	NS	0	0
		52			0	0			12	NS	0	0

TABLE B-172 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER WHITE CATFISH DURING RIVER RUN 2. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	0	0	0	0	0	NS	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	
TAPPAN ZEE	0	0	0	0	0	0	0	23	299	17	17	
	0	0	0	0	0	0	0	23	116	9	9	
CROTON-HAVERSTRAW	0	0	0	0	0	0	0	0	17	6	6	
	0	0	0	0	0	0	0	0	12	4	4	
INDIAN POINT	0	0	0	0	0	0	0	19	30	5	5	
	0	0	0	0	0	0	0	19	23	5	5	
WEST POINT	0	0	NS	0	0	0	0	26	NS	0	0	
	0	0	0	0	0	0	0	16	0	0	0	
CORNWALL	0	0	0	0	0	0	0	22	0	0	0	
	0	0	0	0	0	0	0	22	0	0	0	
POUGHKEEPSIE	0	0	NS	0	0	0	0	0	NS	0	0	
	0	0	0	0	0	0	0	0	0	0	0	
HYDE PARK	101	0	NS	0	0	0	0	31	NS	0	0	
	101	0	0	0	0	0	0	20	0	0	0	
KINGSTON	0	71	NS	0	0	0	0	19	NS	0	0	
	0	40	0	0	0	0	0	19	0	0	0	
SAUGERTIES	0	123	NS	2	2	2	69	63	NS	0	0	
	0	40	0	0	0	0	69	26	0	0	0	
CATSKILL	53	103	NS	0	0	0	162	73	NS	0	0	
	53	28	0	0	0	109	27	0	0	0	0	
ALBANY	NS	97	NS	0	0	0	NS	23	NS	2	2	
		31	0	0	0	0	17	0	0	0	0	

TABLE B-173 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER WHITE CATFISH DURING RIVER RUN 3. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	0	0	0	0	0	NS	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	
TAPPAN ZEE	0	0	0	0	0	0	0	0	164	17	9	
	0	0	0	0	0	0	0	0	63	0	0	
(ROTON-HAVERSTRAW	0	0	0	0	0	0	0	33	53	0	0	
	0	0	0	0	0	0	0	23	31	0	0	
INDIAN POINT	0	0	0	0	0	0	0	20	18	0	0	
	0	0	0	0	0	0	0	20	12	0	0	
WEST POINT	0	0	NS	NS	0	0	0	0	NS	0	0	
	0	0	0	0	0	0	0	0	0	0	0	
CORNWALL	0	0	0	0	0	0	0	21	0	0	0	
	0	0	0	0	0	0	0	21	0	0	0	
POUGHKEEPSIE	0	0	NS	NS	0	0	0	0	NS	0	0	
	0	0	0	0	0	0	0	0	0	0	0	
HYDE PARK	109	18	NS	NS	0	0	0	0	NS	0	0	
	109	18	0	0	0	0	0	0	0	0	0	
KINGSTON	0	39	NS	NS	0	0	0	48	NS	0	0	
	0	29	0	0	0	0	0	21	0	0	0	
SAUGERTIES	0	81	NS	NS	2	2	0	129	NS	0	0	
	0	38	0	0	0	0	0	54	0	0	0	
CATSKILL	0	169	NS	NS	0	0	0	126	NS	0	0	
	0	48	0	0	0	0	0	50	0	0	0	
ALBANY	NS	49	NS	NS	0	0	NS	36	NS	0	0	
		10	0	0	0	0		14				

TABLE B-174 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER WHITE CATFISH DURING RIVER RUN '4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	0	0	0	0	0	NS	0	0	0	
TAPPAN ZEE	0	0	0	0	0	0	0	42	125	8	0	
	0	0	0	0	0	0	0	42	64	6	0	
KROTON-HAVERSTRAW	0	0	0	0	0	0	0	0	0	4	0	
	0	0	0	0	0	0	0	0	0	3	0	
INDIAN POINT	0	0	0	0	0	0	0	0	28	0	0	
	0	0	0	0	0	0	0	0	22	0	0	
WEST POINT	0	0	NS	0	0	0	0	11	NS	0	0	
	0	0	0	0	0	0	0	11	0	0	0	
CORNWALL	0	0	0	0	0	0	0	0	4	0	0	
	0	0	0	0	0	0	0	0	4	0	0	
POUGHKEEPSIE	0	0	NS	0	0	0	0	36	NS	0	0	
	0	0	0	0	0	0	0	36	0	0	0	
HYDE PARK	0	15	NS	0	0	0	0	0	NS	0	0	
	0	15	0	0	0	0	0	0	0	0	0	
KINGSTON	0	32	NS	0	0	0	0	53	NS	0	0	
	0	23	0	0	0	0	0	36	0	0	0	
SAUGERTIES	92	115	NS	0	0	0	0	33	NS	0	0	
	92	43	0	0	0	0	0	17	0	0	0	
LAISKILL	0	223	NS	0	0	0	0	203	NS	0	0	
	0	63	0	0	0	0	0	49	0	0	0	
ALBANY	NS	59	NS	0	0	0	NS	29	NS	0	0	
		18	0	0	0	0	0	10	0	0	0	

TABLE B-175 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER WHITE CATFISH DURING RIVER RUN 5. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR				YEARLING AND OLDER			
	FALL SHOALS		BEACH SEINE		FALL SHOALS		BEACH SEINE	
	CHANNEL	BOTTOM	SHOAL	SHORE	CHANNEL	BOTTOM	SHOAL	SHORE
YUNKERS	0	NS	0	0	0	NS	0	0
	0		0	0	0		0	0
TAPPAN ZEE	0	0	0	0	0	41	97	6
	0		0	0	0	27	32	3
CROTON-HAVERS TRAW	0	0	0	0	0	48	9	0
	0		0	0	0	26	9	0
INDIAN POINT	0	0	0	0	0	0	0	0
	0		0	0	0	0	0	0
WEST POINT	0	0	NS	0	0	0	NS	0
	0		0	0	0	0	0	0
CORNWALL	0	0	0	0	0	0	8	0
	0		0	0	0	0	5	0
POUGHKEEPSIE	0	65	NS	0	0	0	NS	0
	0	65		0	0	0	0	0
HYDE PARK	113	14	NS	0	0	0	NS	0
	113	14		0	0	0	0	0
KINGSTON	0	0	NS	0	0	0	NS	0
	0		0	0	0	0	0	0
SAUGERTIES	0	18	NS	0	0	0	NS	0
	0	12		0	0	0	0	0
CATSKILL	0	78	NS	0	0	58	NS	0
	0	29		0	0	18	NS	0
ALBANY	NS	61	NS	0	NS	17	NS	0
		20		0	7			0

TABLE B-176 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER WHITE CATFISH DURING RIVER RUN 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	0	0	0	0	0	NS	7	7	0	
	0		0	0	0	0	0		7		0	
IAPPAN ZEE	0	0	0	0	0	0	0	0	74	4	4	
	0	0	0	0	0	0	0	0	32	3	3	
(ROTON-HAVERSTRAW	0	0	0	0	0	0	0	0	166	0	0	
	0	0	0	0	0	0	0	0	64	0	0	
INDIAN POINT	0	0	0	0	0	0	0	15	0	0	0	
	0	0	0	0	0	0	0	15	0	0	0	
WEST POINT	0	0	NS	NS	0	0	0	0	NS	0	0	
	0	0	0	0	0	0	0	0	0	0	0	
CORNWALL	0	0	0	0	0	0	0	0	27	0	0	
	0	0	0	0	0	0	0	0	12	0	0	
POUGHKEEPSIE	0	93	NS	NS	0	0	0	0	NS	0	0	
	0	93	0	0	0	0	0	0	0	0	0	
HYDE PARK	110	9	NS	NS	0	0	0	9	NS	0	0	
	110	9	0	0	0	0	0	9	0	0	0	
KINGSTON	0	20	NS	NS	0	0	0	9	NS	0	0	
	0	10	0	0	0	0	0	9	0	0	0	
SAUGERTIES	0	15	NS	NS	0	0	0	28	NS	0	0	
	0	10	0	0	0	0	0	28	0	0	0	
CATSKILL	0	41	NS	NS	0	0	0	83	NS	0	0	
	0	24	0	0	0	0	0	32	0	0	0	
ALBANY	NS	8	NS	NS	0	0	NS	17	NS	0	0	
		6	0	0	0	0	11					

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TABLE B-177 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER WHITE CATFISH DURING RIVER RUN 7. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YUNKERS	0	NS	0	0	0	0	0	NS	0	0	0	
TAPPAN ZEE	0	0	0	0	0	0	0	22	165	0	0	
	0	0	0	0	0	0	0	22	54	0	0	
CROTON-HAVERSTRAW	0	0	0	0	0	0	0	34	18	0	0	
	0	0	0	0	0	0	0	24	12	0	0	
INDIAN POINT	0	0	0	0	0	0	0	18	11	0	0	
	0	0	0	0	0	0	0	18	11	0	0	
WEST POINT	0	0	NS	NS	0	0	0	14	NS	0	0	
	0	0	0	0	0	0	0	14	0	0	0	
CORNWALL	0	0	4	4	0	0	0	0	4	0	0	
	0	0	4	4	0	0	0	0	4	0	0	
POUGHKEEPSIE	230	35	NS	NS	0	0	0	0	NS	1	1	
	230	35	0	0	0	0	0	0	0	0	0	
HYDE PARK	189	12	NS	NS	0	0	0	0	NS	0	0	
	189	12	0	0	0	0	0	0	0	0	0	
KINGSTON	0	36	NS	NS	0	0	0	0	NS	0	0	
	0	19	0	0	0	0	0	0	0	0	0	
SAUGERTIES	0	0	NS	NS	0	0	0	18	NS	0	0	
	0	0	0	0	0	0	0	18	0	0	0	
CATSKILL	0	89	NS	NS	0	0	43	41	NS	0	0	
	0	28	0	0	0	0	43	22	0	0	0	
ALBANY	NS	17	NS	NS	0	0	NS	21	NS	0	0	
		6	0	0	0	0	9	0	0	0	0	

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TABLE B-178 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER WHITE CATFISH DURING RIVER RUN 8. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS		BEACH SEINE		BEACH SEINE		FALL SHOALS		BEACH SEINE		BEACH SEINE	
	CHANNEL	BOTTOM	SHOAL	SHORE	CHANNEL	SHORE	CHANNEL	BOTTOM	SHOAL	SHORE	CHANNEL	SHORE
YONKERS	0	NS	0	0	0	0	0	NS	0	0	0	0
TAPPAN ZEE	0	0	0	0	0	0	0	0	129	4	0	0
	0	0	0	0	0	0	0	0	52	3	0	0
KROTON-HAVERSTRAW	0	0	0	0	0	0	0	10	92	0	0	0
	0	0	0	0	0	0	0	10	52	0	0	0
INDIAN POINT	0	0	0	0	0	0	0	0	21	0	0	0
	0	0	0	0	0	0	0	0	10	0	0	0
WEST POINT	0	0	NS	0	0	0	0	0	NS	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
CORNWALL	0	22	0	0	0	0	0	22	22	0	0	0
	0	22	0	0	0	0	0	22	10	0	0	0
POUGHKEEPSIE	297	0	NS	0	0	0	297	62	NS	0	0	0
	297	0	0	0	0	0	297	62	0	0	0	0
HYDE PARK	0	15	NS	0	0	0	0	30	NS	0	0	0
	0	15	0	0	0	0	0	19	0	0	0	0
KINGSTON	0	10	NS	0	0	0	0	20	NS	0	0	0
	0	10	0	0	0	0	0	13	NS	0	0	0
SAUGERTIES	0	21	NS	0	0	0	0	0	NS	0	0	0
	0	15	0	0	0	0	0	0	0	0	0	0
CATSKILL	0	49	NS	0	0	0	0	76	NS	0	0	0
	0	20	0	0	0	0	0	27	0	0	0	0
ALBANY	NS	0	NS	0	0	0	NS	13	NS	0	0	0
	0	0	0	0	0	0	7	0	0	0	0	0

TABLE B-179 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER SPOTTAIL SHINER DURING RIVER RUN 1. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	0	0	0	0	0	NS	0	0	0	
TAPPAN ZEE	0	0	0	0	4	4	0	0	0	0	0	
CROTON-HAVERSTRAW	0	0	0	0	13	8	0	0	0	0	56	
INDIAN POINT	0	0	0	0	4	2	0	0	0	0	0	
WEST POINT	0	0	NS	NS	16	10	0	0	0	NS	8	
CORNWALL	0	0	0	0	2	2	0	0	0	0	3	
POUGHKEEPSIE	0	0	NS	NS	60	32	0	0	0	NS	6	
HYDE PARK	0	0	NS	NS	26	18	0	0	0	NS	4	
KINGSTON	0	0	NS	NS	2	2	0	0	0	NS	2	
SAUGERTIES	0	0	NS	NS	12	7	0	0	0	NS	1	
CATSKILL	0	0	NS	NS	1055	450	0	0	0	NS	28	
ALBANY	NS	0	NS	NS	283	118	NS	3	NS	NS	25	
		0						9	9		38	
								0	0		20	
								0	0		53	
								0	0		45	
								NS	NS		118	
								3	3		54	

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TABLE B-1B2 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER SPOTTAIL SHINER DURING RIVER RUN 4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	0	0	0	0	0	NS	0	0	0	
HAPPAN ZEE	0	0	0	0	0	0	0	0	0	0	0	
CROTON HAVERSTRAW	0	0	0	104	100	0	0	0	0	0	27	
INDIAN POINT	0	0	0	0	0	0	0	0	0	0	22	
WEST POINT	0	0	NS	4	3	0	0	0	NS	0	16	
CORNWALL	0	0	0	0	0	0	0	0	0	4	5	
POUGHKEEPSIE	0	0	NS	0	0	0	0	0	NS	0	2	
HYDE PARK	0	0	NS	8	4	0	0	0	NS	0	0	
KINGSTON	0	0	NS	10	8	0	0	0	NS	0	2	
SAUGERTIES	0	0	NS	20	9	0	0	132	NS	0	28	
CATSKILL	0	8	NS	124	78	0	0	60	NS	0	13	
ALBANY	NS	24	NS	481	255	0	NS	71	NS	0	35	
		10						33			26	

TABLE B-183 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER SPOTTAIL SHINER DURING RIVER RUN 5. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE
YONKERS	0	NS	0	0	0	0	0	NS	0	0	0	0
TAPPAN ZEE	0	0	0	0	0	0	0	0	0	0	0	0
CROTON HAVERSTRAW	0	0	0	0	8	8	0	0	0	0	0	0
INDIAN POINT	0	0	0	0	0	0	0	0	0	0	0	0
WEST POINT	0	0	NS	NS	12	7	0	0	0	NS	6	3
CORNWALL	0	0	0	0	16	12	0	0	0	0	28	19
POUGHKEEPSIE	0	0	NS	NS	7	5	0	0	0	NS	7	5
HYDE PARK	0	0	NS	NS	7	2	0	0	0	NS	22	14
KINGSTON	0	0	NS	NS	38	18	0	0	0	NS	7	7
SAUGERTIES	0	0	NS	NS	14	8	0	0	0	NS	32	21
CATSKILL	0	0	NS	NS	65	46	0	0	0	NS	24	24
ALBANY	NS	0	NS	NS	157	157	NS	0	0	NS	0	0

TABLE B-186 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YOUNG-OF-YEAR AND YEARLING AND OLDER SPOTTAIL SHINER DURING RIVER RUN 8. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YOUNG-OF-YEAR				YEARLING AND OLDER			
	FALL SHOALS		BEACH SEINE		FALL SHOALS		BEACH SEINE	
	CHANNEL	BOTTOM	SHOAL	SHORE	CHANNEL	BOTTOM	SHOAL	SHORE
YONKERS	0	NS	0	0	0	NS	0	0
TAPPAN ZEE	0	0	0	0	0	0	0	0
CROTON HAVERSTRAW	0	0	0	19	0	0	0	6
INDIAN POINT	0	0	0	14	0	0	0	6
WEST POINT	0	0	0	0	0	0	0	0
CORNWALL	0	0	0	0	0	0	0	0
HOUGHKEEPSIE	0	0	NS	17	0	0	NS	6
HYDE PARK	0	0	0	16	0	0	0	4
KINGSTON	0	0	0	5	0	0	0	16
SAUGERTIES	0	0	0	2	0	0	0	8
CATSKILL	0	0	NS	33	0	0	NS	35
ALBANY	0	0	0	14	0	0	0	15
	0	0	NS	11	0	0	NS	10
	0	0	0	5	0	0	0	4
	0	0	NS	59	0	0	NS	19
	0	0	0	43	0	0	0	9
	0	0	NS	63	0	9	NS	32
	0	0	0	57	0	9	0	24
	0	0	NS	24	0	8	NS	6
	0	0	0	11	0	8	0	3
	NS	14	NS	52	NS	4	NS	23
		7		21		4		15

TABLE B-187 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YEARLING AND OLDER ATLANTIC STURGEON DURING RIVER RUNS 1 AND 2. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YEARLING AND OLDER						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YUNKERS	0	NS	0	0	0	0	0	NS	0	0	0	
TAPPAN ZEE	0	0	0	0	0	0	0	0	0	0	0	
CROTON-HAVERSTRAW	0	0	8	8	0	0	0	0	0	0	0	
INDIAN POINT	0	0	0	0	0	0	0	0	0	0	0	
WEST POINT	0	0	NS	NS	0	0	0	0	NS	0	0	
CORNWALL	0	0	0	0	0	0	0	0	0	0	0	
POUGHKEEPSIE	0	0	NS	NS	0	0	0	0	NS	0	0	
HYDE PARK	0	0	NS	NS	0	0	0	0	NS	0	0	
KINGSTON	0	10	NS	NS	0	0	0	0	NS	0	0	
SAUGERTIES	0	9	NS	NS	0	0	0	8	NS	0	0	
CATSKILL	0	0	NS	NS	0	0	0	0	NS	0	0	
ALBANY	NS	4	NS	NS	0	0	NS	0	NS	0	0	

TABLE B-188 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YEARLING AND OLDER ATLANTIC STURGEON DURING RIVER RUNS 3 AND 4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YEARLING AND OLDER				YEARLING AND OLDER			
	FALL SHOALS		BEACH SEINE		FALL SHOALS		BEACH SEINE	
	CHANNEL	BOTTOM	SHOAL	SHORE	CHANNEL	BOTTOM	SHOAL	SHORE
YONKERS	0	NS	0	0	0	NS	0	0
TAPPAN ZEE	0	0	0	0	0	0	0	0
CROTON HAVERSTRAW	0	0	0	0	0	0	0	0
INDIAN POINT	0	0	0	0	0	0	0	0
WEST POINT	0	0	NS	0	0	0	NS	0
CORNWALL	0	0	0	0	0	0	0	0
POUGHKEEPSIE	0	0	NS	0	0	0	NS	0
HYDE PARK	0	0	NS	0	0	14	NS	0
KINGSTON	0	0	NS	0	0	10	NS	0
SAUGERTIES	0	0	NS	0	0	11	NS	0
CAISKILL	0	0	NS	0	0	0	NS	0
ALBANY	NS	0	NS	0	NS	0	NS	0

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TABLE B-189 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YEARLING AND OLDER ATLANTIC STURGEON DURING RIVER RUNS 5 AND 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YEARLING AND OLDER				YEARLING AND OLDER			
	FALL SHOALS		BEACH SEINE		FALL SHOALS		BEACH SEINE	
	CHANNEL	BOTTOM	SHOAL	SHORE	CHANNEL	BOTTOM	SHOAL	SHORE
YONKERS	0	NS	0	0	0	NS	0	0
TAPPAN ZEE	0	0	0	0	0	0	0	0
CROTON HAVERSTRAW	0	0	0	0	0	11	0	0
INDIAN POINT	0	0	0	0	0	0	0	0
WEST POINT	0	0	NS	0	0	0	NS	0
CORNWALL	0	0	0	0	0	0	0	0
POUGHKEEPSIE	0	0	NS	0	0	0	NS	0
HYDE PARK	0	0	NS	0	0	0	NS	0
KINGSTON	0	0	NS	0	0	0	NS	0
SAUGERTIES	0	9	NS	0	0	0	NS	0
CATSKILL	0	0	NS	0	0	0	NS	0
ALBANY	NS	0	NS	0	NS	0	NS	0

TABLE B-190 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YEARLING AND OLDER ATLANTIC STURGEON DURING RIVER RUNS 7 AND 8. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YEARLING AND OLDER				YEARLING AND OLDER			
	FALL SHOALS		BEACH SEINE		FALL SHOALS		BEACH SEINE	
	CHANNEL	BOTTOM	SHOAL	SHORE	CHANNEL	BOTTOM	SHOAL	SHORE
YONKERS	0	NS	0	0	0	NS	0	0
TAPPAN ZEE	0	0	0	0	0	0	0	0
CRUTON-HAVERSTRAW	0	0	0	0	0	0	0	0
INDIAN POINT	0	0	0	0	0	0	0	0
WEST POINT	0	30	NS	0	0	0	NS	0
CORNWALL	0	0	0	0	0	43	0	0
POUGHKEEPSIE	0	0	NS	0	0	0	NS	0
HYDE PARK	0	0	NS	0	0	0	NS	0
KINGSTON	0	0	NS	0	0	10	NS	0
SAUGERTIES	0	0	NS	0	0	0	NS	0
GATSKILL	0	0	NS	0	0	0	NS	0
ALBANY	NS	0	NS	0	NS	0	NS	0

TABLE B-191 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YEARLING AND OLDER SHORTNOSE STURGEON DURING RIVER RUNS 1 AND 2. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YEARLING AND OLDER						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	0	0	0	0	0	NS	0	0	0	
TAPPAN ZEE	0	0	10	10	0	0	0	0	0	0	0	
ROTON-HAVERSTRAW	0	0	0	0	0	0	0	0	0	0	0	
INDIAN POINT	0	0	0	0	0	0	0	0	0	0	0	
WEST POINT	0	0	NS	NS	0	0	0	0	NS	0	0	
CORNWALL	0	0	0	0	0	0	0	0	0	0	0	
POUGHKEEPSIE	0	0	NS	NS	0	0	0	0	NS	0	0	
HYDE PARK	0	0	NS	NS	0	0	0	0	NS	0	0	
KINGSTON	0	0	NS	NS	0	0	0	0	NS	0	0	
SAUGERTIES	0	0	NS	NS	0	0	0	0	NS	0	0	
CATSKILL	0	0	NS	NS	0	0	0	0	NS	0	0	
ALBANY	NS	0	NS	NS	0	0	NS	0	NS	0	0	

TABLE B-192 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YEARLING AND OLDER SHORTNOSE STURGEON DURING RIVER RUNS 3 AND 4. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YEARLING AND OLDER				YEARLING AND OLDER			
	FALL SHOALS		BEACH SEINE		FALL SHOALS		BEACH SEINE	
	CHANNEL	BOTTOM	SHOAL	SHORE	CHANNEL	BOTTOM	SHOAL	SHORE
YONKERS	0	NS	0	0	0	NS	0	0
	0		0	0	0		0	0
IAPPAN ZEE	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
GROTON-HAVERSTRAW	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
INDIAN POINT	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
WEST POINT	0	0	NS	0	0	0	NS	0
	0	0		0	0	0		0
CORNWALL	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
POUGHKEEPSIE	0	0	NS	0	0	0	NS	0
	0	0		0	0	0		0
HYDE PARK	0	0	NS	0	0	0	NS	0
	0	0		0	0	0		0
KINGSTON	0	0	NS	0	0	0	NS	0
	0	0		0	0	0		0
SAUGERTIES	0	9	NS	0	0	0	NS	0
	0	9		0	0	0		0
CATSKILL	0	0	NS	0	0	0	NS	0
	0	0		0	0	0		0
ALBANY	NS	0	NS	0	NS	0	NS	0
		0		0		0		0

TABLE B-193 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YEARLING AND OLDER SHORTNOSE STURGEON DURING RIVER RUNS 5 AND 6. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YEARLING AND OLDER						YEARLING AND OLDER					
	FALL SHOALS			BEACH SEINE			FALL SHOALS			BEACH SEINE		
	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	SHORE	CHANNEL	BOTTOM	SHOAL	SHOAL	SHORE	
YONKERS	0	NS	0	0	0	0	0	NS	0	0	0	
TAPPAN ZEE	0	0	0	0	0	0	0	0	0	0	0	
CROTON-HAVERSTRAW	0	0	0	0	0	0	0	0	0	0	0	
INDIAN POINT	0	0	0	0	0	0	0	0	0	0	0	
WEST POINT	0	0	NS	0	0	0	0	0	NS	0	0	
CORNWALL	0	0	0	0	0	0	0	13	0	0	0	
POUGHKEEPSIE	0	0	NS	0	0	0	0	13	0	0	0	
HYDE PARK	0	0	NS	0	0	0	0	0	NS	0	0	
KINGSTON	0	10	NS	0	0	0	0	0	NS	0	0	
SAUGERTIES	0	10	NS	0	0	0	0	0	NS	0	0	
CAJSKILL	0	0	NS	0	0	0	0	0	NS	0	0	
ALBANY	NS	0	NS	0	0	0	NS	0	NS	0	0	

TABLE B-194 1984 FALL SHOALS AND BEACH SEINE SURVEYS STANDING CROP DATA (IN THOUSANDS) FOR YEARLING AND OLDER SHORTNOSE STURGEON DURING RIVER RUNS 7 AND 8. STANDARD ERRORS (IN THOUSANDS) ARE PRINTED BELOW EACH STANDING CROP. "NS" INDICATES THAT THE STRATUM WAS NOT SAMPLED.

REGION	YEARLING AND OLDER				YEARLING AND OLDER			
	FALL SHOALS		BEACH SEINE		FALL SHOALS		BEACH SEINE	
	CHANNEL	BOTTOM	SHOAL	SHORE	CHANNEL	BOTTOM	SHOAL	SHORE
YONKERS	0	NS	0	0	0	NS	0	0
JAPPAN ZEE	0	0	0	0	0	0	0	0
GRUTON HAVERSRAW	0	0	0	0	0	0	0	0
INDIAN POINT	0	0	0	0	0	0	0	0
WEST POINT	0	0	NS	0	0	0	NS	0
CORNWALL	0	0	0	0	0	0	0	0
POUGHKEEPSIE	0	0	NS	0	0	0	NS	0
HYDE PARK	0	0	NS	0	0	0	NS	0
KINGSTON	54	0	NS	0	0	0	NS	0
SAUGERTIES	0	0	NS	0	0	0	NS	0
CATSKILL	0	0	NS	0	0	0	NS	0
ALBANY	NS	0	NS	0	NS	0	NS	0

APPENDIX C

LENGTH DATA

TABLE C-1. WEEKLY MEAN LENGTHS (TL IN MM) OF AMERICAN SHAD YOLK-SAC LARVAE COLLECTED IN THE HUDSON RIVER ESTUARY DURING THE LONGITUDINAL RIVER (LR) SURVEY. "S.E." INDICATES THE STANDARD ERROR AND "N" IS THE NUMBER OF FISH MEASURED.

WEEK BEGINNING MONDAY	TASK	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	TOTAL
07MAY84	LR MEAN S.E. N							9.8	10.2 0.1 4	9.4 0.2 16	8.5 0.3 6	8.7 0.2 9	8.7 0.1 117	8.9 0.1 153
14MAY84	LR MEAN S.E. N					11.6 0.2 5	10.8 0.2 31	10.7 0.2 49	10.2 0.1 241	10.3 0.1 146	10.4 0.1 75	10.3 0.1 144	9.8 0.1 129	10.3 0.1 820
21MAY84	LR MEAN S.E. N			12.5	1		11.5 0.2 4	11.2 0.1 112	11.3 0.1 58	11.2 0.2 46	10.7 0.2 46	11.3 0.1 55	11.6 0.1 45	11.2 0.0 367
28MAY84	LR MEAN S.E. N			10.4 0.1 38	10.3 0.1 170	10.5 0.0 371	10.5 0.1 335	10.4 0.0 612	10.2 0.1 238	10.2 0.1 83	10.3 0.1 84	10.0 0.1 65	9.2 0.4 12	10.4 0.0 2008
04JUN84	LR MEAN S.E. N	10.1 0.3 3	10.3 0.1 16	10.5 0.1 78	10.5 0.0 169	10.6 0.0 221	10.1 0.1 114	10.2 0.1 213	9.7 0.1 124	10.0 0.2 31	10.1 0.1 52	10.0 0.2 56	9.8 0.1 86	10.2 0.0 1163
11JUN84	LR MEAN S.E. N							10.0	10.4 0.3 10	10.1 0.1 91	9.2 0.2 39	9.9 0.1 85	9.9 0.1 65	9.9 0.1 291
18JUN84	LR MEAN S.E. N							9.3			9.5 0.3 15	9.7 0.1 33	9.1 0.9 2	9.6 0.1 51
25JUN84	LR MEAN S.E. N											9.9 0.3 2	9.9 0.3 2	9.9 0.3 2

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TABLE C-2. WEEKLY MEAN LENGTHS (TL IN MM) OF AMERICAN SHAD POST VOLK-SAC LARVAE COLLECTED IN THE HUDSON RIVER ESTUARY DURING THE LONGITUDINAL RIVER (LR) SURVEY. "S.E." INDICATES THE STANDARD ERROR AND "N" IS THE NUMBER OF FISH MEASURED.

WEEK BEGINNING MONDAY	TASK	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	TOTAL
21MAY84	LR					12.0	11.7	11.9	11.8	12.1	12.1	11.9	11.8	11.9
	MEAN S.E.					0.2	0.2	0.0	0.0	0.1	0.1	0.1	0.1	0.0
						8	7	150	164	118	40	34	45	566
28MAY84	LR			12.1	12.3	11.9	12.0	11.6	11.9	12.1	12.4	12.7		11.9
	MEAN S.E.			0.2	0.1	0.1	0.1	0.1	0.5	0.6	0.2	1.3		0.0
				38	111	305	105	163	14	3	6	2		747
04JUN84	LR	12.5	11.9	11.5	11.6	11.5	11.5	11.3	11.1	10.9	11.5	11.1	11.2	11.4
	MEAN S.E.		0.4	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.3	0.2	0.0
		1	9	66	197	270	102	184	55	53	20	7	4	968
11JUN84	LR				13.7					11.6	10.6	11.6	10.7	11.4
	MEAN S.E.									0.2	0.2	0.1	0.1	0.1
					1					6	3	39	15	64
18JUN84	LR							13.2	12.7	13.4	14.2	15.9	16.0	15.2
	MEAN S.E.								0.3	0.3	0.2	0.1	0.3	0.1
								1	10	26	69	147	46	299
25JUN84	LR							17.8	20.2	19.3	21.3	21.1	18.8	20.9
	MEAN S.E.							2.6	0.8	0.6	0.3	0.2	1.4	0.2
								2	7	26	61	153	6	255
02JUL84	LR						22.8	23.9	25.2	24.9	24.6	21.5	21.6	23.9
	MEAN S.E.						0.7	0.9	0.8	0.7	0.5	0.8	0.8	0.3
							3	6	14	20	45	27	2	117
09JUL84	LR								24.4	24.7	27.0	23.2		25.6
	MEAN S.E.								2.3	2.2	0.3	1.3		0.5
								3	5	5	27	13		48

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TABLE C-3. WEEKLY MEAN LENGTHS (TL IN MM) OF YOUNG-OF-YEAR AMERICAN SHAD COLLECTED IN THE HUDSON RIVER ESTUARY DURING THE 1984 FALL SHOALS (FS), BEACH SEINE (BS), AND LONGITUDINAL RIVER (LR) SURVEYS. "S.E." INDICATES THE STANDARD ERROR AND "N" IS THE NUMBER OF FISH MEASURED.

WEEK BEGINNING MONDAY	TASK	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	TOTAL
02JUL84	LR	MEAN S.E. N						31.0	33.0	31.4	31.1	33.4	28.0	31.8
								1	12	24	57	23	1	118
09JUL84	LR	MEAN S.E. N				41.2 2.6 6		41.2 0.7 26	39.2 0.4 92	38.7 0.5 67	36.4 0.4 114	32.5 0.7 25	34.5 1.9 5	37.8 0.3 335
16JUL84	FS	MEAN S.E. N	58.0	56.0 0.6 7	55.7 1.0 6	54.8 0.9 4	49.8 2.0 12	50.8 1.2 17	44.8 0.8 32	45.0 0.6 61	46.7 0.6 69	43.5 0.7 95	40.6 1.3 27	45.6 0.3 331
23JUL84	BS	MEAN S.E. N	63.1 0.4 54	61.5 0.4 47	60.7 1.2 10	56.6 1.0 22	60.0 0.5 40	56.1 0.8 50	49.0 1.4 19	54.8 1.0 5	49.1 1.3 39	46.8 1.1 35	43.7 1.5 26	55.6 0.4 351
30JUL84	FS	MEAN S.E. N	66.5 0.4 37	67.1 0.6 33	65.8 1.0 14	67.8 2.0 5	66.9 1.1 14	65.3 1.3 4	62.2 1.4 13	63.8 1.2 27	66.4 0.7 58	63.8 1.3 47	59.5 1.6 28	64.9 0.4 284
06AUG84	BS	MEAN S.E. N	67.1 0.8 34	67.9 0.4 40	68.5 0.7 29	68.2 0.8 19	68.9 0.6 58	66.2 0.9 33	60.2 0.9 15	61.8 2.1 9	61.7 1.1 28	63.0 1.9 25	59.9 1.6 32	65.7 0.3 329
13AUG84	FS	MEAN S.E. N	72.0 0.5 14	71.1 0.5 28	71.4 1.3 5	91.0 0.6 28	80.0 7.0 2	72.0 1 1	71.4 1.7 8	71.9 1.0 12	79.7 2.3 7	73.0 2.3 10	77.0 3.7 7	73.0 0.6 96
20AUG84	BS	MEAN S.E. N	72.0 0.5 45	73.5 0.7 36	74.0 0.7 20	74.8 0.6 28	73.1 0.5 41	70.9 0.5 42	67.2 0.9 25	68.7 1.6 15	73.4 0.8 41	71.7 1.0 31	63.4 1.3 35	71.3 0.3 359
27AUG84	FS	MEAN S.E. N	74.5 0.9 4	76.0 1.3 10	72.2 2.1 5	73.5 1.4 23	73.5 2.0 2	77.0 2.0 2	76.8 2.5 4	79.8 1.7 11	79.8 1.2 22	79.9 1.0 38	82.6 3.0 5	77.6 0.5 154
03SEP84	BS	MEAN S.E. N	76.2 0.6 33	75.0 0.5 40	75.8 0.9 21	76.7 0.8 15	76.8 0.5 41	74.2 0.6 21	72.1 0.6 21	76.9 1.1 18	80.5 0.6 39	77.6 1.2 40	68.1 1.2 29	75.7 0.3 320
10SEP84	FS	MEAN S.E. N	79.6 0.6 9	81.0 1.1 16	33.2 6.4 11	77.8 1.1 4	85.0 1.1 1	83.3 2.6 8	89.8 4.5 5	92.6 3.5 10	89.8 4.5 5	91.4 1.3 38	89.0 1.0 21	82.1 1.7 124

TABLE C-3. CONTINUED

WEEK BEGINNING MONDAY	TASK	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	TOTAL
17SEP84	BS	MEAN S.E. N	78.2 0.5 30	78.6 1.0 12	77.2 0.7 16	78.4 0.9 11	79.5 0.7 25	80.1 0.7 38	79.1 0.8 17	82.1 1.6 15	84.3 0.8 37	84.0 1.2 20	76.0 1.8 23	80.1 0.3 244
24SEP84	FS	MEAN S.E. N	80.6 1.4 9	84.5 1.5 16	90.5 3.1 4	81.0 1.8 1	80.5 1.8 4	83.8 2.8 4	88.0 3.5 3	92.5 1.4 21	93.6 1.8 25	97.4 1.0 41	88.5 1.9 16	91.2 0.7 144
01OCT84	BS	MEAN S.E. N	84.0 2.0 2	85.4 1.1 22	86.0 0.9 33	83.8 0.8 14	84.4 1.0 17	83.0 0.5 46	83.5 0.7 12	88.0 0.7 21	88.0 0.7 21	86.0 1.8 12	77.5 1.2 17	84.1 0.4 199
06OCT84	FS	MEAN S.E. N	83.5 4.5 2	92.3 1.5 18	93.0 2.9 6	98.0 3.3 5	93.6 2.1 17	88.5 3.5 2	88.7 6.2 3	98.4 2.0 9	91.8 2.5 6	96.3 7.7 4	83.6 2.7 14	91.6 1.0 87
15OCT84	BS	MEAN S.E. N	83.8 1.8 5	87.6 0.7 11	86.4 1.5 8	88.1 1.4 7	89.1 0.8 31	84.9 0.6 39	84.7 0.8 15	83.5 0.5 2	84.8 2.8 6	80.5 2.0 6	74.4 1.1 5	86.0 0.4 155
22OCT84	FS	MEAN S.E. N	91.6 1.3 14	92.8 1.1 33	98.8 2.2 9	107.6 7.3 5	93.6 1.8 27	105.4 4.2 10	98.9 5.7 7	101.7 1.7 15	101.0 2.9 12	102.4 1.7 33	86.8 2.6 6	97.4 0.8 174
29OCT84	BS	MEAN S.E. N	91.4 1.0 33	87.5 0.6 30	89.5 1.0 24	88.9 0.9 15	87.1 0.8 28	87.4 0.9 16	89.9 1.3 7	85.2 2.5 6	89.0 1.1 1	89.0 1.1 1	80.4 1.2 8	88.3 0.4 169

TABLE C-4. WEEKLY MEAN LENGTHS (TL IN MM) OF YOUNG-OF-YEAR ATLANTIC TOMCOD COLLECTED IN THE HUDSON RIVER ESTUARY DURING THE 1984 FALL SHOALS (FS) AND BEACH SEINE (BS) SURVEYS. "S.E." INDICATES THE STANDARD ERROR AND "N" IS THE NUMBER OF FISH MEASURED.

WEEK BEGINNING MONDAY	TASK	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	TOTAL
16JUL84	FS	MEAN 72.8 S.E. 2.2 N 20	73.3 0.8 127	67.3 1.1 60	62.9 1.1 31	64.8 0.8 49	72.6 2.3 10	70.5 1.0 8	67.6 1.3 13	71.0 1 1	66.0 1 1			69.5 0.5 320
23JUL84	BS	MEAN 74.5 S.E. 1.1 N 28	77.0 1.1 28	77.0 7.0 2										74.7 1.1 30
30JUL84	FS	MEAN 72.0 S.E. 1.3 N 45	80.1 0.9 149	79.1 1.3 49	69.5 1.5 27	63.1 0.7 64	73.6 1.8 33	70.0 1.4 24	69.2 2.0 11	70.3 1.6 12	79.0 3.4 4	76.5 7.5 2		74.1 0.5 420
06AUG84	BS	MEAN 95.5 S.E. 5.5 N 2	76.5 1.2 28											77.7 1.5 30
13AUG84	FS	MEAN 71.7 S.E. 2.1 N 30	71.9 1.6 57	78.3 1.8 36	71.0 1.8 30	65.5 1.7 29	70.2 1.1 41	60.5 2.5 2	69.5 1.1 21					71.4 0.7 246
20AUG84	BS	MEAN 89.4 S.E. 4.6 N 10	89.4 4.6 10		60.5 2.5 2	62.0 1 1								82.8 4.9 13
27AUG84	FS	MEAN 70.3 S.E. 2.2 N 39	80.9 1.7 82	82.0 2.6 25	77.9 4.3 11	73.3 2.6 33	68.0 1.7 42	66.6 2.9 8	68.0 1 1	86.0 1 1				75.4 0.9 242
03SEP84	BS	MEAN 73.0 S.E. 2.6 N 1	79.8 2.6 15	85.7 4.2 9										81.6 2.2 25
10SEP84	FS	MEAN 78.4 S.E. 2.9 N 21	81.1 2.7 38	82.8 3.4 17	77.1 2.9 11	72.1 2.2 23	73.6 2.6 19	73.0 2.3 28	70.7 4.0 6	72.4 2.5 11	76.8 6.2 4	91.0 1 1		76.6 1.0 179
17SEP84	BS	MEAN 90.0 S.E. 14.5 N 3	85.4 4.7 12	74.0 1 1										85.6 4.3 16
24SEP84	FS	MEAN 89.4 S.E. 3.1 N 32	89.7 3.2 23	83.9 4.9 14	82.6 3.8 15	74.3 3.4 23	77.1 2.0 25	81.3 7.2 4	80.9 3.8 13	85.6 2.5 19	86.1 4.5 14	80.8 3.6 4		83.4 1.1 186

TABLE C-4. CONTINUED

WEEK BEGINNING MONDAY	TASK	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	TOTAL
01OCT84	BS	MEAN 105.3 S.E. 12.2 N 4	102.7 3.4 13		89.7 4.5 3									101.3 3.3 20
08OCT84	FS	MEAN 102.2 S.E. 3.1 N 35	97.5 4.2 22	98.5 5.9 11	99.0 8.2 8	81.2 2.2 32	90.0 3.1 26	92.4 2.5 23	89.3 3.8 12	94.2 2.3 30	96.7 3.2 9	98.0 10.0 2		93.4 1.1 210
15OCT84	BS	MEAN 94.0 S.E. 11.3 N 1	104.7 11.3 3	103.0 1 1	101.0 5.0 2									101.9 4.6 7
22OCT84	FS	MEAN 104.3 S.E. 3.7 N 21	111.0 1.5 51	110.1 6.1 10	94.4 7.8 8	88.2 5.2 13	106.3 2.5 22	97.3 3.3 21	107.3 7.1 6	108.2 2.9 13	108.7 4.5 6	116.8 3.7 17		106.0 1.2 188
29OCT84	BS	MEAN 117.6 S.E. 3.3 N 7	117.6 3.3 7	117.3 15.9 3	110.0 1 1									116.8 4.3 11

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TABLE C-5. WEEKLY MEAN LENGTHS (TL IN MM) OF YOUNG-OF-YEAR BAY ANCHOVY COLLECTED IN THE HUDSON RIVER ESTUARY DURING THE 1984 FALL SHOALS (FS) AND BEACH SEINE (BS) SURVEYS. "S.E." INDICATES THE STANDARD ERROR AND "N" IS THE NUMBER OF FISH MEASURED.

WEEK BEGINNING MONDAY	TASK	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	TOTAL
16JUL84	FS	MEAN	15.2	15.9	16.8	18.2		21.0				19.0		16.4
	S.E.	0.4	0.3	0.3	0.6		1.0							0.2
		N	21	85	64	16		2				1		189
23JUL84	BS	MEAN	27.6		20.5									26.9
	S.E.	0.7		0.5										0.8
		N	18		2									20
30JUL84	FS	MEAN	21.2	26.2	25.0	23.2	22.4	24.7	23.5	22.6	22.8	20.8	20.0	24.5
	S.E.	1.1	0.3	0.4	0.4	0.6	0.5	0.5	0.5	0.6	0.5	1.6	0.2	0.2
		N	17	178	126	65	50	59	2	13	4	10	1	532
06AUG84	BS	MEAN	32.8	31.0								30.7		32.5
	S.E.	0.7	0.7	1.0								2.8		0.7
		N	41	2							3			46
13AUG84	FS	MEAN	32.5	32.0	31.5	29.1	30.3	32.7	32.2	28.3	22.8	23.7	26.0	30.3
	S.E.	1.0	0.4	0.6	1.1	1.2	0.7	3.4	1.0	0.5	0.5	0.6	0.0	0.3
		N	63	229	135	61	44	9	11	75	64	23	2	775
20AUG84	BS	MEAN	38.0	34.2			39.9							38.1
	S.E.	0.9	1.5			0.9								0.7
		N	22	5		12								39
27AUG84	FS	MEAN	40.7	38.3	31.3	27.8	37.5	36.0	33.0	31.8	26.7	26.2	23.0	34.0
	S.E.	1.0	0.5	0.7	1.4	1.8	1.0	1.0	1.1	0.7	0.4	0.7	0.6	0.3
		N	65	230	125	43	34	62	44	74	55	44	25	831
03SEP84	BS	MEAN	33.8	39.0	28.0	51.0	42.8							37.5
	S.E.	2.0	3.0		2.1	1.2								1.5
		N	20	11	1	3	5							40
10SEP84	FS	MEAN	34.0	34.8	30.7	29.9	29.1	39.8	36.0	39.1	35.1	22.2	22.5	34.1
	S.E.	1.0	0.7	0.7	1.2	1.5	1.7	1.5	1.7	1.4	3.1	1.8	2.5	0.4
		N	56	230	135	80	58	85	46	55	15	6	2	820
17SEP84	BS	MEAN	35.3	40.2			44.1	49.3						42.0
	S.E.	3.3	2.0			1.8	0.9							1.3
		N	4	23		14	3	1						45
24SEP84	FS	MEAN	40.4	40.5	38.3	34.9	37.7	39.8	48.1	38.3	25.0	26.3	26.0	40.1
	S.E.	1.3	0.7	0.9	0.9	1.0	1.1	1.2	2.3	3.1	1	4.3	0.4	0.4
		N	60	230	140	70	75	65	27	19	1	4	1	761

TABLE C- 5. CONTINUED

BEGINNING MONDAY	TASK	WEEK											TOTAL	
		YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS		AL
01OCT84	BS	MEAN S.E. N	41.1 2.1 19	43.3 1.4 20	28.5 0.5 2	51.0 1.0 2	52.0 0.8 5	50.7 1.2 24			40.0 1		26.0 1	43.6 1.0 84
08OCT84	FS	MEAN S.E. N	39.2 0.7 230	41.9 0.6 134	39.7 1.0 70	42.0 1.1 62	39.5 1.1 65	46.8 2.0 17	49.5 5.8 6			21.0 1.0 2		39.8 0.4 646
15OCT84	BS	MEAN S.E. N	34.9 1.5 16	26.2 0.5 5	40.7 5.8 3		46.5 8.5 2	44.2 1.7 10						34.4 0.9 66
22OCT84	FS	MEAN S.E. N	42.5 0.6 230	43.5 0.7 135	39.8 1.3 69	40.4 1.2 61	39.6 1.1 65	45.6 1.1 64	52.3 4.8 3					42.0 0.4 687
29OCT84	BS	MEAN S.E. N	46.2 1.3 20	39.0 1.6 5		54.8 1.4 6	51.0 1.0 2							49.7 1.1 53

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TABLE C-6. WEEKLY MEAN LENGTHS (TL IN MM) OF STRIPED BASS YOLK-SAC LARVAE COLLECTED IN THE HUDSON RIVER ESTUARY DURING THE LONGITUDINAL RIVER (LR) SURVEY. "S.E." INDICATES THE STANDARD ERROR AND "N" IS THE NUMBER OF FISH MEASURED.

WEEK BEGINNING MONDAY	TASK	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	TOTAL
07MAY84	LR				4.5 0.1 38	5.0 0.2 8	4.6 0.1 12	4.5 0.1 17						4.5 0.1 75
14MAY84	LR	5.3 0.1 23	5.4 0.0 171	5.0 0.1 175	4.9 0.1 154	5.0 0.0 335	4.3 0.1 76	4.4 0.1 9	4.4 1					5.0 0.0 944
21MAY84	LR		5.9 0.3 13	5.8 0.1 86	5.6 0.1 147	5.4 0.1 115	5.0 0.1 52	4.4 0.1 40	3.9 1					5.4 0.0 454
28MAY84	LR		5.2 0.1 107	4.8 0.1 97	4.6 0.2 24	4.5 0.2 11	5.0 1	4.4 1		5.5 1				4.9 0.1 242
04JUN84	LR	4.4 0.3 5	4.4 0.1 56	4.2 0.1 90	4.4 0.1 36	4.8 0.1 101	4.1 0.1 34	4.3 0.0 209	4.1 0.1 69					4.4 0.0 600
11JUN84	LR		5.4 0.2 8	6.0 0.0 86	5.4 0.0 293	5.2 0.0 690	5.4 0.0 424	5.3 0.0 386	4.8 0.0 360	4.3 0.0 159	4.2 0.1 33	4.1 0.2 15		5.2 0.0 2454
18JUN84	LR		5.3 0.4 7	5.7 0.2 12	5.5 0.0 94	5.3 0.0 291	5.3 0.0 134	5.4 0.0 131	5.2 0.0 141	5.1 0.1 26	4.4 0.3 6	4.7 0.3 2		5.3 0.0 844
25JUN84	LR				5.7 0.1 9	5.2 0.1 76	5.0 0.0 157	4.8 0.1 85	4.3 0.2 13	4.5 0.1 3	5.0 0.2 3	5.3 0.3 3		5.0 0.0 349
02JUL84	LR				4.3 1	5.2 1	5.2 1							4.7 0.5 2
09JUL84	LR							5.1 0.5 2						5.1 0.5 2

TABLE C-7. WEEKLY MEAN LENGTHS (TL IN MM) OF STRIPED BASS POST YOLK-SAC LARVAE COLLECTED IN THE HUDSON RIVER ESTUARY DURING THE LONGITUDINAL RIVER (LR) SURVEY. "S.E." INDICATES THE STANDARD ERROR AND "N" IS THE NUMBER OF FISH MEASURED.

WEEK BEGINNING MONDAY	TASK	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	TOTAL	
21MAY84	LR	MEAN	7.7	6.9	6.7	6.8	6.9							6.9	
		S.E.		0.0		0.1	0.1								0.1
		N	1	3	1	6	2								13
28MAY84	LR	MEAN	7.0	6.9										7.0	
		S.E.	0.1	0.3											0.1
		N	8	3											11
04JUN84	LR	MEAN	6.5											6.5	
		S.E.													
		N	1												1
11JUN84	LR	MEAN	6.6	6.3	6.2	6.1	6.0	6.0	5.7	5.2				6.1	
		S.E.	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1				0.0
		N	2	17	96	188	307	174	29		3				931
18JUN84	LR	MEAN	7.6	6.6	6.9	6.4	6.4	6.4	5.9	5.6	5.7	5.2	8.0		6.5
		S.E.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	1	0.0
		N	1	138	441	686	631	492	232	95	15	1	1		3363
25JUN84	LR	MEAN	7.8	7.3	7.6	7.9	7.5	7.5	7.7	7.4	7.5	8.3		7.6	
		S.E.	0.3	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.3	0.4		0.0
		N	24	197	680	892	666	384	108	76	27	19			3073
02JUL84	LR	MEAN	11.7	11.6	9.6	9.0	10.1	11.6	11.7	11.5	13.4	13.4		10.1	
		S.E.	0.3	0.2	0.1	0.1	0.1	0.2	0.3	0.3	0.1	0.3	0.6		0.0
		N	5	144	461	604	630	78	56	70	46	6			2742
09JUL84	LR	MEAN	12.3	11.0	13.0	14.9	14.5	13.8	15.2	16.4	16.5	18.1		13.6	
		S.E.	0.2	0.4	0.5	0.5	0.3	0.3	0.3	0.7	0.4	0.3	1.9		0.1
		N	64	67	153	50	121	69	9	31	60	2			672

TABLE C-8. WEEKLY MEAN LENGTHS (TL IN MM) OF YOUNG-OF-YEAR STRIPED BASS COLLECTED IN THE HUDSON RIVER ESTUARY DURING THE 1984 FALL SHOALS (FS), BEACH SEINE (BS), AND LONGITUDINAL RIVER (LR) SURVEYS. "S.E." INDICATES THE STANDARD ERROR AND "N" IS THE NUMBER OF FISH MEASURED.

WEEK BEGINNING MONDAY	TASK	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	TOTAL
09JUL84	LR	MEAN	22.8		23.4	24.3	21.9	27.0			21.1			22.8
		S.E.	2.3		0.5	0.9	0.4	0.0			0.8			0.3
		N	2		19	6	21	2			4			54
16JUL84	FS	MEAN	22.4	24.6	24.7	22.8	21.7	18.5	18.5	21.8	23.5	26.3	33.0	23.2
		S.E.	1.2	1.6	0.6	2.7	1.0	1.5	0.8	0.8	0.8	1.7	0.5	0.0
		N	1	22	13	5	25	2	13	11	6	22	2	140
23JUL84	BS	MEAN	39.7	38.5	33.7	30.9	36.8	35.8	33.0	37.0	38.8	34.9	40.5	37.0
		S.E.	1.3	2.0	1.3	1.0	1.1	1.2	1.5	1.2	2.6	1.2	1.1	1.5
		N	54	15	18	33	18	11	11	6	12	13	2	230
30JUL84	FS	MEAN	36.9	40.9	41.3	36.0	36.7	24.0	41.0	43.8	44.3	42.6	42.3	39.3
		S.E.	0.7	0.7	1.3	7.5	1.3	4.0	3.1	4.0	3.1	1.4	2.1	1.3
		N	2	72	38	3	39	1	3	4	11	8	7	254
06AUG84	BS	MEAN	50.1	50.3	51.6	40.9	49.0	44.7	39.1	42.0	53.1	55.5	52.0	49.3
		S.E.	1.1	1.2	1.4	1.6	1.3	0.9	2.1	2.0	1.2	0.6	0.6	0.5
		N	84	50	33	10	21	13	7	2	13	6	1	278
13AUG84	FS	MEAN	56.8	52.9	52.9	52.9	52.3		62.0	58.8	55.5	70.0	63.7	54.5
		S.E.	2.3	2.0	1.9	1.4	1.4	1.0	1.9	1.0	1.9	2.3	0.0	3.7
		N	17	27	18	28		2	2	12	13	2	3	130
20AUG84	BS	MEAN	65.5	64.9	60.3	58.6	61.6	55.0	52.0	61.6	62.6	68.8	76.0	63.6
		S.E.	1.1	1.3	4.4	1.8	2.0	1.0	1.8	1.8	1.4	0.9	1.5	0.6
		N	83	49	6	36	21	2	1	11	21	25	1	283
27AUG84	FS	MEAN	69.0	64.9	59.6	56.0	58.8		65.3	69.8	66.3	73.0	62.0	65.0
		S.E.	1.5	2.3	2.8	1.3	1.3	3.1	3.1	3.1	2.1	2.1	0.9	0.9
		N	3	29	7	19		6	5	9	1	1	105	
03SEP84	BS	MEAN	75.1	73.1	67.1	58.1	70.0	67.0	66.0	73.8	68.6	74.8	76.0	71.7
		S.E.	1.3	1.6	1.7	2.5	5.0	7.0	1.0	1.0	1.6	1.8	1.5	0.7
		N	21	69	35	8	3	2	2	4	9	8	1	225
10SEP84	FS	MEAN	76.1	74.3	74.3		69.0		72.8		72.8			75.1
		S.E.	1.6	1.2	2.4		1		3.5		3.5			0.9
		N	4	36	6			5		5			77	
17SEP84	BS	MEAN	79.8	77.4	70.7	65.7	65.9	65.5	79.0	63.0	67.0	81.0	82.0	74.0
		S.E.	1.1	1.5	1.8	2.4	1.4	3.5	1	0.0	0.0	0.0	2.0	0.7
		N	18	64	26	22	34	2	1	1	1	1	2	222

TABLE C-8. CONTINUED

WEEK BEGINNING MONDAY	TASK	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	TOTAL
24SEP84	FS	MEAN S.E. N	83.2 6.5 5	86.1 1.4 61	84.1 1.6 30	70.0 13.0 2	91.5 25.5 2	72.0 2.9 11	68.0 13.0 2	77.7 3.0 7	74.4 1.7 14			82.3 1.0 134
01OCT84	BS	MEAN S.E. N	89.7 1.4 24	85.3 1.1 92	79.5 1.4 51	78.1 1.2 36	72.3 4.0 11	70.8 2.7 5	74.8 4.8 4	76.5 1.5 2	79.0 2.0 2			81.3 0.7 246
08OCT84	FS	MEAN S.E. N	87.8 1.3 13	81.5 4.1 6	75.3 4.9 3	73.0 8.0 2	65.0 8.0 2		80.0 1.9 26					82.3 1.9 26
15OCT84	BS	MEAN S.E. N	88.2 2.3 13	84.3 1.1 55	81.7 1.4 55	83.1 1.4 30	67.8 4.4 4	61.6 1.4 5	79.0 1.4 5					81.6 0.7 182
22OCT84	FS	MEAN S.E. N	91.1 2.9 17	94.5 1.1 89	88.5 2.9 15	71.7 1.3 20	75.5 6.6 11		83.0 1.1 155					88.9 1.1 155
29OCT84	BS	MEAN S.E. N	99.9 5.6 12	88.2 1.2 64	88.8 1.8 48	88.1 3.4 14	71.2 1.6 9	79.5 2.4 11	70.8 1.9 5	83.0 2.3 4	80.0 1.0 2	92.0 1.0 2	79.0 1.0 1	86.7 0.9 179

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TABLE C-9. WEEKLY MEAN LENGTHS (TL IN MM) OF WHITE PERCH YOLK-SAC LARVAE COLLECTED IN THE HUDSON RIVER ESTUARY DURING THE LONGITUDINAL RIVER (LR) SURVEY. "S.E." INDICATES THE STANDARD ERROR AND "N" IS THE NUMBER OF FISH MEASURED.

WEEK BEGINNING MONDAY	TASK	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	TOTAL
07MAY84	LR	MEAN S.E. N	4.1 0.1 2	4.1 0.1 2	4.0 0.0 39	4.0 0.0 62	4.0 0.0 168	3.9 0.0 180	3.7 0.0 190	3.7 0.0 243	3.4 0.0 111	3.3 0.1 48	3.2 0.1 20	3.8 0.0 1065
14MAY84	LR	MEAN S.E. N	3.8 0.1 8	3.5 0.1 130	3.8 0.0 71	4.1 0.0 480	3.9 0.0 316	3.8 0.0 350	3.7 0.0 463	3.5 0.0 275	3.6 0.0 68	3.3 0.0 51	3.3 0.1 8	3.8 0.0 2269
21MAY84	LR	MEAN S.E. N	3.8 0.1 12	3.9 0.0 54	4.0 0.0 111	3.8 0.0 218	3.8 0.0 236	3.9 0.0 564	3.9 0.0 223	3.8 0.0 107	3.8 0.0 34	3.4 0.1 49	3.7 0.1 5	3.9 0.0 1613
28MAY84	LR	MEAN S.E. N	4.0 0.0 31	3.9 0.0 156	3.9 0.0 187	3.7 0.0 273	3.8 0.0 206	3.8 0.1 37	3.5 0.1 31	3.9 0.1 4	3.5 0.4 3	3.8 0.3 2	3.8 0.0 930	3.8 0.0 930
04JUN84	LR	MEAN S.E. N	3.7 0.0 51	3.8 0.0 121	3.8 0.0 164	3.7 0.0 80	3.7 0.0 43	3.7 0.0 141	3.3 0.0 85	3.4 0.1 21	3.2 0.1 20	3.2 0.1 25	3.1 0.1 13	3.6 0.0 817
11JUN84	LR	MEAN S.E. N	3.2 0.1 21	3.6 0.1 43	3.7 0.1 21	3.6 0.0 95	3.6 0.0 200	3.6 0.0 176	3.5 0.0 147	3.5 0.0 125	3.3 0.0 46	3.3 0.0 90	3.4 0.0 54	3.5 0.0 1018
18JUN84	LR	MEAN S.E. N	3.5 0.0 25	3.5 0.0 111	3.6 0.0 39	3.5 0.0 48	3.5 0.0 103	3.6 0.0 61	3.4 0.0 58	3.3 0.0 56	3.5 0.0 53	3.3 0.0 60	3.4 0.0 8	3.5 0.0 622
25JUN84	LR	MEAN S.E. N	3.2 0.1 3	3.5 0.1 13	3.4 0.0 56	3.5 0.1 23	3.5 0.0 51	3.4 0.1 12	3.4 0.0 18	3.4 0.1 7	3.3 0.1 2	3.3 0.1 8	3.3 0.1 12	3.4 0.0 205
02JUL84	LR	MEAN S.E. N	3.5 0.1 6	3.5 0.1 15	3.5 0.0 8	3.4 0.1 8	3.4 0.1 8	3.4 0.1 8	3.4 0.1 8	3.4 0.1 8	3.4 0.1 8	3.4 0.1 8	3.4 0.1 8	3.5 0.0 31
09JUL84	LR	MEAN S.E. N	3.5 0.1 6	3.5 0.1 15	3.5 0.1 8	3.4 0.1 8	3.4 0.1 8	3.4 0.1 8	3.4 0.1 8	3.4 0.1 8	3.4 0.1 8	3.4 0.1 8	3.4 0.1 8	3.3 0.1 11

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TABLE C-10. WEEKLY MEAN LENGTHS (TL IN MM) OF WHITE PERCH POST VOLK-SAC LARVAE COLLECTED IN THE HUDSON RIVER ESTUARY DURING THE LONGITUDINAL RIVER (LR) SURVEY. "S.E." INDICATES THE STANDARD ERROR AND "N" IS THE NUMBER OF FISH MEASURED.

WEEK BEGINNING MONDAY	TASK	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	TOTAL
07MAY84	LR	MEAN S.E. N		4.4 0.1 3	4.4 0.1 3	4.3 0.1 2	4.1 0.0 3							4.3 0.1 8
14MAY84	LR	MEAN S.E. N	4.2 0.1 10	4.4 0.1 16	4.2 0.0 113	4.3 0.0 497	4.1 0.0 300	4.2 0.0 140	4.1 0.1 21	4.1 0.1 8	4.2 0.1 5	4.3 0.2 4		4.2 0.0 1222
21MAY84	LR	MEAN S.E. N	4.4 0.0 69	4.5 0.0 270	4.4 0.0 518	4.4 0.0 637	4.5 0.0 307	4.4 0.0 408	4.3 0.0 52	4.3 0.1 7	4.3 0.0 3	3.9 0.1 2	4.0 1	4.4 0.0 2274
28MAY84	LR	MEAN S.E. N	4.9 0.5 2	4.5 0.0 187	4.1 0.0 260	4.1 0.0 171	4.1 0.0 62	5.0 0.3 24	5.0 0.3 23	4.8 0.3 16	5.9 0.6 7	7.5 0.2 7		4.4 0.0 923
04JUN84	LR	MEAN S.E. N	4.3 0.0 101	4.2 0.0 167	4.2 0.0 159	4.2 0.1 58	3.7 0.1 9	4.6 0.2 52	5.5 0.4 18	5.6 1.5 2	7.2 1			4.3 0.0 676
11JUN84	LR	MEAN S.E. N	4.6 0.1 60	4.8 0.1 123	5.1 0.1 149	4.5 0.1 255	4.1 0.0 340	4.0 0.0 237	4.1 0.0 273	4.0 0.0 175	3.8 0.0 104	3.8 0.0 90	3.6 0.0 36	4.2 0.0 1842
18JUN84	LR	MEAN S.E. N	5.1 0.1 4	4.8 0.0 293	5.2 0.1 691	4.6 0.0 563	4.7 0.0 539	5.6 0.0 573	5.7 0.1 362	5.5 0.1 244	5.5 0.1 127	5.2 0.1 120	5.0 0.2 62	5.1 0.0 3821
25JUN84	LR	MEAN S.E. N	6.2 0.3 7	5.2 0.2 33	5.2 0.1 610	6.1 0.0 950	6.0 0.0 772	6.3 0.1 648	5.9 0.1 402	5.7 0.1 293	6.2 0.1 178	6.6 0.2 172	3.9 0.1 36	5.9 0.0 4101
02JUL84	LR	MEAN S.E. N	8.3 0.2 71	7.3 0.1 416	7.1 0.1 743	7.3 0.0 966	7.8 0.0 840	8.7 0.1 601	8.5 0.1 384	8.4 0.1 300	7.4 0.1 180	6.6 0.2 174	5.0 0.4 41	7.7 0.0 4716
09JUL84	LR	MEAN S.E. N	10.1 0.4 8	8.4 0.2 110	8.6 0.1 486	9.1 0.1 237	9.0 0.1 334	10.3 0.1 440	8.9 0.1 341	10.1 0.2 297	9.4 0.3 178	9.9 0.5 44		9.2 0.0 27403

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TABLE C-11. WEEKLY MEAN LENGTHS (TL IN MM) OF YOUNG-OF-YEAR WHITE PERCH COLLECTED IN THE HUDSON RIVER ESTUARY DURING THE 1984 FALL SHOALS (FS), BEACH SEINE (BS), AND LONGITUDINAL RIVER (LR) SURVEYS. "S.E." INDICATES THE STANDARD ERROR AND "N" IS THE NUMBER OF FISH MEASURED.

WEEK BEGINNING MONDAY	TASK	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	TOTAL
09JUL84	LR	MEAN S.E. N								21.0 0.6 3	21.0 0.0 2			21.0 0.3 5
16JUL84	FS	22.0 7.0 2	13.0 0.0 2			18.0 1.5 3	15.6 0.4 17	18.3 1.4 7	16.6 0.4 41	16.8 0.6 28	14.0 1.5 3	13.9 0.3 22	13.0 0.3 1	16.1 0.3 126
23JUL84	BS	MEAN S.E. N	30.7 3.4 7	43.8 7.3 5	34.3 1.2 17	30.6 1.1 19	29.0 1.4 6	28.0 0.6 27	26.9 0.8 17	27.3 1.2 3	28.5 1.0 11	31.6 1.0 28		30.5 0.5 140
30JUL84	FS	MEAN S.E. N	25.2 2.9 6	32.5 1.5 2	26.7 2.7 3	19.0 3.7 1	27.3 3.7 10	20.5 1.3 6	25.1 0.8 22	27.7 1.2 13	43.7 4.5 6		35.0 1.0 1	27.4 1.0 70
06AUG84	BS	MEAN S.E. N	32.7 1.1 30	38.3 1.7 29	42.4 1.4 10	40.8 2.1 24		36.6 1.1 19	38.6 1.0 10	39.2 2.1 13	40.9 2.1 11	40.1 3.2 9	48.0 1.0 1	38.1 0.6 156
13AUG84	FS	MEAN S.E. N		36.0		47.3 4.9 3		33.0 4.5 3	32.7 1.1 23	38.5 3.6 8	42.0			35.3 1.3 39
20AUG84	BS	MEAN S.E. N	51.7 0.7 3	47.8 1.2 38	54.9 2.1 8	49.4 1.7 23	53.1 2.6 10	41.3 1.6 12	52.3 1.8 16	58.1 1.5 15	56.9 1.0 28	57.1 1.6 12	59.4 0.7 5	52.3 0.6 195
27AUG84	FS	MEAN S.E. N	56.0	50.5 2.5 2		50.9 1.8 14		44.6 5.9 5	44.0 1.4 5		62.3 2.2 6	68.0		51.6 1.6 34
03SEP84	BS	MEAN S.E. N	48.0	57.1 1.2 31	60.7 1.1 38	57.4 1.5 23		50.7 1.5 3	68.6 1.3 8	68.0 1.8 6	65.5 1.5 2	67.3 2.8 6	69.6 2.1 5	59.5 0.6 148
10SEP84	FS	MEAN S.E. N				62.0 1 1		64.0 6.1 3	47.5 3.5 6	57.0 4.5 4				54.8 2.8 14
17SEP84	BS	MEAN S.E. N	63.1 1.2 36	63.6 1.2 35	58.6 1.2 18	61.0 1.5 24	63.3 1.1 43	65.3 5.0 3	68.1 1.2 10	75.0 1.4 5	71.3 1.6 6	76.1 0.9 12		64.2 0.6 192

TABLE C-11. CONTINUED

WEEK BEGINNING MONDAY	TASK	YK	TZ	CH	IP	WP	CW	PK	HP	KG	SG	CS	AL	TOTAL
24SEP84	FS	MEAN S.E. N			58.0		67.0 1.1 8	62.3 5.2 4	59.0 2.9 3	73.3 1.4 16	75.8 1.6 8			69.9 1.2 40
01OCT84	BS	MEAN S.E. N	71.5 3.5 2	68.5 1.1 36	68.2 1.4 37	69.0 2.6 10	64.1 1.4 31	66.3 2.7 4	71.7 2.6 7	76.5 0.5 2	80.1 1.4 8	77.3 2.7 6	86.0 1	69.2 0.6 164
08OCT84	FS	MEAN S.E. N			62.0		68.0 2.5 3	55.6 2.7 11	53.1 1.3 9	76.4 0.9 5	72.0 1			60.8 1.9 31
15OCT84	BS	MEAN S.E. N	73.9 2.0 12	68.5 1.1 33	69.4 2.1 11	65.3 1.7 20	67.5 1.9 14	59.8 2.4 6		81.6 2.5 5	79.3 1.6 7			69.3 0.8 108
22OCT84	FS	MEAN S.E. N					68.8 1.5 23	66.8 5.5 4	57.4 2.0 13	70.2 4.1 5	80.8 2.5 8	77.7 1.4 11		69.5 1.3 64
29OCT84	BS	MEAN S.E. N	77.2 2.0 18	71.4 3.3 7	66.0 6.0 2	65.8 1.1 34	82.3 2.6 8	73.5 1.5 2	76.5 1.7 6		76.0 1.0 2	79.0 1		71.9 1.0 80

APPENDIX D

STRIPED BASS HATCHERY RECAPTURE DATA

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Table D-1. Number released, release dates, and release locations associated with each tag code used in the 1984 hatchery program

Tag Code	Number Released	Release Dates	Release Location
Blank	4085	06-08 August	37-38
1	3858	13-16 August	36-38
2	4679	13-16 August	36-38
3	3872	20-21 August	36-37
4	3662	20-21 August	36-37
5	2528	22-23 August	33
6	1336	22-23 August	33
7	2027	22-23 August	33
8	1841	22-23 August	33
9	4541	28-31 August	35-38
10	5039	28-31 August	35-38
11	5971	28-31 August	32-33
12	6145	28-31 August	32-33
13	7738	04-08 September	35-41
14	8405	05-08 September	35-38
15	9029	04-08 September	29-41
16	6055	04-08 September	29-41
17	728	08 September	41
18	1661	09 September	41
19	1498	09 September	41
20	928	09 September	41
21	4853	10-11 September	41
22	4110	10-11 September	41
23	4875	10-11 September	41
24	1899	10-11 September	41
25	4592	12-13 September	38
26	3394	12-13 September	38
27	1243	12-13 September	38
28	3082	12-13 September	38
29	768	14 September	33
30	796	14 September	33
31	816	14 September	33
32	716	14 September	33
33	1739	17 September	22
34	1319	17 September	22
35	369	17 September	22
36	2428	18-20 September	33
37	4045	18-20 September	33
38	4397	18-20 September	33
39	3010	18-20 September	33
40	5642	24-26 September	29-32
41	4485	24-26 September	29-32
42	1918	25 September	33
43	1031	22-23 October	41

Table D-2. Summary of recapture data for the 1984 Hatchery program.

RIVER MILE	TAG CODE	LENGTH (mm)	WEIGHT (gms)	RECAPTURE AGENT*	RECAPTURE DATE
65	.	79	3.2	2	23AUG84
36	.	84	5.9	1	24AUG84
36	.	93	8.6	1	24AUG84
35	.	92	8.8	1	25AUG84
30	.	89	.	3	04SEP84
33	.	97	8.3	3	05SEP84
34	.	81	4.8	3	05SEP84
34	.	90	5.8	3	05SEP84
35	.	85	.	3	05SEP84
35	.	.	.	3	05SEP84
35	.	.	.	3	05SEP84
37	.	70	.	3	05SEP84
37	.	85	5.1	3	05SEP84
65	.	91	5.2	2	06SEP84
42	.	90	6.4	2	10SEP84
42	.	99	7.6	2	10SEP84
42	.	92	5.8	2	10SEP84
42	.	88	7.0	2	10SEP84
42	.	71	4.0	2	10SEP84
42	.	83	7.2	2	10SEP84
42	.	85	4.4	2	10SEP84
42	.	92	7.0	2	10SEP84
42	.	78	8.7	2	11SEP84
42	.	75	4.6	2	13SEP84
42	.	95	8.4	2	13SEP84
42	.	88	7.2	2	13SEP84
42	.	104	8.7	2	13SEP84
42	.	75	4.5	2	13SEP84
42	.	80	5.9	2	13SEP84
42	.	75	4.3	2	13SEP84
42	.	96	8.8	2	13SEP84
44	.	95	8.5	1	18SEP84
66	.	71	5.9	2	20SEP84
36	.	92	7.8	1	25SEP84
66	.	100	7.1	2	27SEP84
46	.	80	5.3	1	28SEP84
27	.	98	8.2	3	02OCT84
27	.	85	4.5	3	02OCT84
30	.	74	4.1	3	02OCT84
29	.	93	7.1	3	04OCT84
66	.	108	11.6	2	04OCT84
42	.	76	4.2	2	08OCT84
66	.	86	5.7	2	11OCT84
42	.	83	5.3	2	29OCT84
37	3	76	4.7	3	21AUG84
35	4	88	6.7	1	25AUG84

*1 = Year Class Studies, 2 = Hudson River Impingement Programs and 3 = NYSDEC Beach Seining Program. Dots indicate missing data.

Table D-2. Continued

RIVER MILE	TAG CODE	LENGTH (mm)	WEIGHT (gms)	RECAPTURE AGENT	RECAPTURE DATE
30	8	78	4.2	3	02OCT84
66	9	110	13.3	2	07SEP84
37	9	82	7.1	1	26SEP84
29	9	100	7.7	3	02OCT84
37	10	78	6.2	1	26SEP84
35	11	80	4.0	3	05SEP84
24	11	88	5.6	3	17SEP84
32	11	82	4.9	1	19SEP84
34	12	85	5.6	3	05SEP84
35	13	92	6.5	3	05SEP84
42	13	98	8.0	2	10SEP84
42	13	77	4.3	2	10SEP84
42	13	101	9.5	2	13SEP84
35	13	72	4.0	3	18SEP84
35	13	78	3.9	3	18SEP84
95	14	95	7.7	1	17SEP84
35	14	97	7.3	3	18SEP84
66	14	106	9.6	2	04OCT84
66	14	89	4.8	2	08OCT84
66	14	118	11.6	2	23OCT84
23	15	105	8.9	3	30OCT84
42	16	94	7.5	2	10SEP84
37	16	81	5.1	3	18SEP84
68	16	100	9.8	1	19SEP84
66	16	86	5.5	2	11OCT84
42	17	93	7.3	2	10SEP84
42	17	86	7.4	2	10SEP84
35	17	68	3.5	1	18SEP84
42	18	75	5.8	2	10SEP84
42	18	98	7.6	2	10SEP84
42	18	78	4.9	2	10SEP84
42	18	100	8.1	2	10SEP84
42	18	85	5.3	2	10SEP84
42	18	76	5.0	2	10SEP84
42	18	71	3.6	2	22OCT84
42	19	72	4.5	2	10SEP84
27	19	77	5.2	3	02OCT84
66	19	103	8.6	2	08OCT84
42	21	92	6.0	2	11SEP84
42	21	88	7.1	2	10SEP84
42	21	70	4.8	2	11SEP84
42	21	83	6.4	2	13SEP84
42	21	70	3.5	2	13SEP84
42	21	103	9.0	2	13SEP84
42	21	95	8.6	2	13SEP84
42	21	100	8.2	2	13SEP84
35	21	92	6.1	3	18SEP84
66	21	96	7.2	2	28SEP84
66	21	99	8.0	2	08OCT84
66	21	104	9.0	2	11OCT84

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Table D-2. Continued

RIVER MILE	TAG CODE	LENGTH (mm)	WEIGHT (gms)	RECAPTURE AGENT	RECAPTURE DATE
42	22	80	6.4	2	11SEP84
42	22	82	7.1	2	13SEP84
42	22	90	7.3	2	13SEP84
68	22	105	12.7	1	19SEP84
66	22	90	6.2	2	08OCT84
66	22	145	38.7	2	11OCT84
66	22	118	13.5	2	15OCT84
42	23	72	4.1	2	10SEP84
42	23	95	6.2	2	10SEP84
42	23	81	4.9	2	10SEP84
42	23	71	5.0	2	10SEP84
42	23	86	8.1	2	10SEP84
42	23	90	6.9	2	10SEP84
42	23	75	5.2	2	11SEP84
42	23	100	9.9	2	11SEP84
42	23	80	6.2	2	11SEP84
42	23	80	7.4	2	11SEP84
42	23	88	7.1	2	11SEP84
42	23	85	6.6	2	11SEP84
42	23	82	6.8	2	13SEP84
42	23	90	7.8	2	13SEP84
42	23	74	4.2	2	13SEP84
42	23	75	4.0	2	13SEP84
42	23	88	8.3	2	13SEP84
42	23	86	8.1	2	13SEP84
42	23	84	8.0	2	13SEP84
42	23	90	7.5	2	13SEP84
42	23	87	7.0	2	13SEP84
42	23	78	4.6	2	13SEP84
42	23	93	8.0	2	13SEP84
35	23	110	12.5	1	18SEP84
66	23	94	6.2	2	27SEP84
66	23	73	8.6	2	11OCT84
42	24	101	9.1	2	10SEP84
42	24	71	8.6	2	10SEP84
42	24	88	5.8	2	10SEP84
42	24	75	5.6	2	10SEP84
42	24	85	8.4	2	10SEP84
42	24	96	7.5	2	10SEP84
42	24	98	8.5	2	10SEP84
42	24	82	5.1	2	10SEP84
42	24	80	5.8	2	13SEP84
42	24	106	12.1	2	13SEP84
42	24	75	4.9	2	13SEP84
42	24	85	7.0	2	13SEP84
42	24	83	6.9	2	13SEP84
42	24	70	3.8	2	13SEP84
42	25	86	7.6	2	13SEP84
42	25	90	7.5	2	13SEP84

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Table D-2. Continued

RIVER MILE	TAG CODE	LENGTH (mm)	WEIGHT (gms)	RECAPTURE AGENT	RECAPTURE DATE
42	25	75	4.4	2	13SEP84
42	25	80	4.8	2	13SEP84
42	25	73	4.5	2	13SEP84
42	25	75	4.7	2	13SEP84
42	25	75	3.6	2	13SEP84
36	25	75	5.3	1	18SEP84
66	25	101	8.6	2	20SEP84
66	25	90	5.8	2	04OCT84
42	26	80	4.4	2	13SEP84
42	27	85	8.2	2	13SEP84
37	28	80	4.8	3	18SEP84
66	28	100	7.5	2	04OCT84
66	28	83	5.2	2	04OCT84
66	28	104	9.6	2	08OCT84
27	30	75	4.8	3	17SEP84
28	32	75	4.5	3	04OCT84
.	33	87	7.1	1	.
27	33	110	11.9	3	02OCT84
27	33	92	6.1	3	02OCT84
27	33	105	10.2	1	17OCT84
27	34	95	7.8	3	02OCT84
35	37	90	5.5	3	16NOV84
66	38	108	10.3	2	15OCT84
66	39	88	5.6	2	23OCT84
27	39	87	6.1	3	30OCT84
37	40	93	8.9	1	26SEP84
35	40	70	3.4	3	03OCT84
35	40	102	8.3	3	18OCT84
66	40	100	8.4	2	01NOV84
.	41	85	8.2	1	.
36	41	88	6.1	3	03OCT84
66	41	94	7.7	2	08OCT84
66	41	91	6.0	2	11OCT84
24	41	98	7.4	3	17OCT84
35	42	87	5.3	3	03OCT84
66	42	91	6.4	2	15OCT84
42	43	94	6.1	2	27OCT84
42	43	88	5.3	2	27OCT84
42	43	95	7.4	2	24OCT84
42	43	85	5.7	2	26OCT84
42	43	83	5.1	2	27OCT84

APPENDIX E

QUALITY CONTROL RESULTS FOR
1984 HUDSON RIVER ICHTHYOPLANKTON LABORATORY
ANALYSIS PROGRAM

INTRODUCTION

The sorting and identification of ichthyoplankton samples collected during the 1984 Hudson River Ichthyoplankton Program was monitored using a continuous sampling inspection quality control (QC) plan. This type of plan requires 100% inspection of samples initially, followed by less frequent inspection of samples should none of the initial group inspected prove defective. However, should an initial sample prove defective or should a sample be found defective during the less frequent inspection then the sorter or person doing the identifications is required to stay in or go back to the first mode of inspection, 100%, until a specified number of subsequent samples are found to be nondefective. The plan is applied separately to the sorting and identifying of organisms i.e., they are viewed as two separate processes.

METHODS

The QC plan chosen is an adaptation of the single stage continuous sampling program (CSP-1) introduced by Dodge (1943). The scope of work for this project required that the plan implemented have an Average Outgoing Quality Limit (AOQL) of 10% with a clearance number, i , equal to 14 and a sampling frequency, f , of $1/20$ (0.05). The clearance number and sampling frequency were derived from the curves in Figure E-1. This specific AOQL means that on the average the maximum number of defective samples should be less than 10%.

The specific plan employed is summarized as follows:

1. The QC person analyzed 100% of the samples (or jars) consecutively until i successive samples met the inspection criterion. This stage in the QC analysis was referred to as mode 1.
2. When i successive units met the inspection criterion the analyzer (person doing original sorting or identification) was released from 100% inspection.
3. Then the QC person analyzed one out of every twenty samples; f . The sample selected for QC inspection was selected in an unbiased (random) manner. This stage in the QC analysis was referred to as mode 2.
4. When the QC person found a sample that did not meet the inspection criterion the analyzer returned to mode 1, 100% inspection, beginning with the next sample to be analyzed.

5. If no sample was found to be defective in mode 2, then the analyzer continued in mode 2.

Acceptance/rejection criteria (a defective sample) for sort and identification were as follows:

Sort: A sample was defective (fails) when more than 10% of the organisms in the sample were uncorrectly sorted.

Identification: A sample was defective (fails) when more than 10% of any taxon present were incorrectly identified.

In order to address some reservations the New York State Department of Environmental Conservation expressed on the existing QC program, some changes in QC procedures were implemented in 1984. These changes were made to ensure that in the identification phase a greater number of samples in the later river runs were subjected to more stringent quality control procedures, and to make certain that all identifiers were proficient in identifying all life stages of each taxa, not just those usually found at the beginning of the season.

The program was changed by grouping the river runs into three major categories:

Group 1 - river runs 2 and 3

Group 2 - river runs 4 through 6

Group 3 - river runs 7 through 11

Each identifier was placed in mode 1, of the QC plan within each Group (e.g., as an identifier completed his assignment in Group 1, and was then assigned samples from Group 2, he automatically was placed in mode 1 regardless of his performance on Group 1 samples.)

Training of Personnel

Inexperienced sorters were trained by regular employees who had several years experience sorting long river ichthyoplankton samples. In each case, the regular employee checked each sample for additional organisms. If organisms were found, the trainer required the new sorter to re-sort the sample while methods to improve the sorter's proficiency were explained. The procedure was followed through mode 1 for all new sorters. This check did not constitute the QC of the sample, which was performed by a third individual. When the sorter was placed in mode 2, the trainer randomly checked samples from several lots to determine the performance of the sorter. Samples checked during mode 2 were not necessarily samples selected for QC.

The proficiencies of the staff were reviewed to select additional sort QC inspectors from among the sort staff. Only staff members with the highest proficiencies were considered, and selection was based on experience, i.e., those who performed this task in previous years were promoted first. Following this, the remaining staff from the initial pool were promoted as needed. New QC inspectors were trained by the regular training staff, who continued to observe the new inspectors throughout the project.

Evaluation of QC Program

The effectiveness of the QC analyses was estimated by calculating the process average (PA) which is the percent defective samples found during the QC reinspection. The process average was calculated for both sort (using jars) and identification (using samples) as follows and averaged for each river run for the whole project.

$$PA = \frac{D}{T} \times 100$$

where

D = Number of defective QC samples (jars for sort)

T = total number of samples QC'd (jars for sort)

(Note: the number of samples and number of jars was not equal because the volume of some samples requires multiple jars for storage).

Another measure used to assess the effectiveness of the sorting of the samples was to calculate the percentage of correctly sorted organisms in each QC'd sample. The percentages were averaged for each river run and for the whole project. Percentage correctly sorted in each sample was calculated by:

$$\% \text{ correct} = 1 - \frac{\text{original analyzer count} - \text{QC count}}{\text{QC count}} \times 100$$

in sample

A comparable measure does not exist for identification of organisms.

RESULTS

Results of the 1984 laboratory analysis quality control program were as follows:

PROCESS AVERAGE (Percent defective samples)

	<u>SORT</u>	<u>ID</u>
1. Overall	3.6	2.0
2. By river run		
River Run 2	0.0 (83) ^a	5.6 (36) ^b
River Run 3	0.0 (52)	0.0 (22)
River Run 4	3.9 (102)	2.9 (69)
River Run 5	5.3 (76)	0.0 (11)
River Run 6	12.0 (75)	0.0 (40)
River Run 7	4.2 (24)	3.4 (29)
River Run 8	0.0 (69)	2.1 (47)
River Run 9	3.8 (26)	4.3 (23)
River Run 10	5.4 (37)	0.0 (11)
River Run 11	0.0 (46)	0.0 (56)

^a () = Number of QC jars.

^b () = Number of QC samples.

PERCENT CORRECTLY SORTED

	<u>SORT</u>
1. Overall	98.21
2. By river run	
River Run 2	99.7
River Run 3	98.5
River Run 4	98.4
River Run 5	97.5
River Run 6	95.6
River Run 7	96.1
River Run 8	99.2
River Run 9	98.6
River Run 10	98.1
River Run 11	99.2

DISCUSSION

The average of defective samples for both sorting and identification for all the samples was 3.6% and 2.0% respectively, well below the AOQL of 10%. Only on river run 6 was the sorting PA higher than expected, reflecting one individual's performance (contributed five of the nine failures recorded for this river run). The overall percent correctly sorted 98.2, is another indication that the quality of the sorting was very high. This measure suggests that over 98% of all organisms present in the samples were found or conversely less than 2% of the organisms present in the samples were missed.

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- Hanson, B.L. 1963. Quality Control: theory and application. Prentice-Hall, Inc., Englewood Cliffs, NJ.

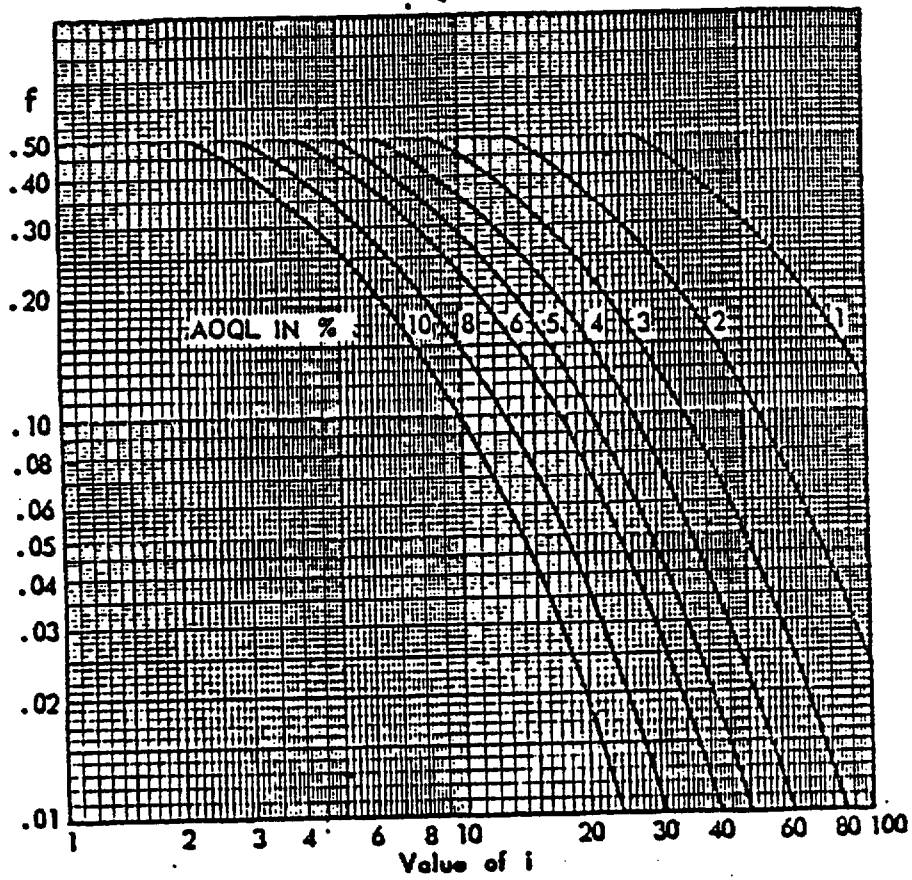


Figure E-1. Basic curves for plan CSP-1. From H.F. Dodge, "Skip Lot Sampling Plan," Industrial Quality Control, February 1955, Taken from Hanson 1963.

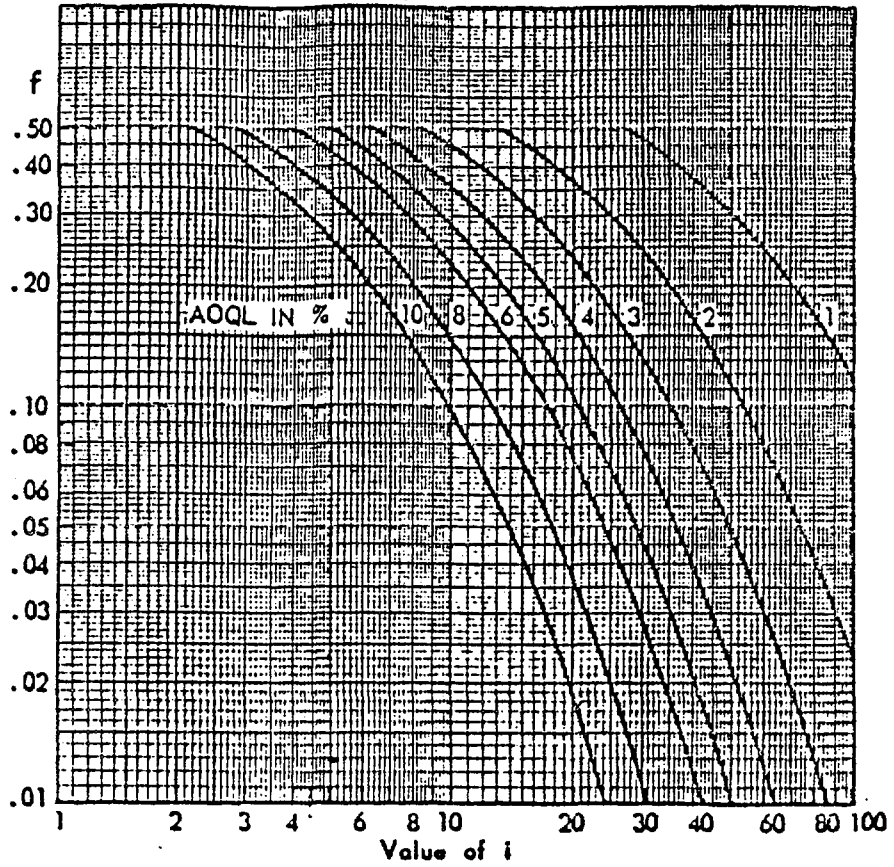
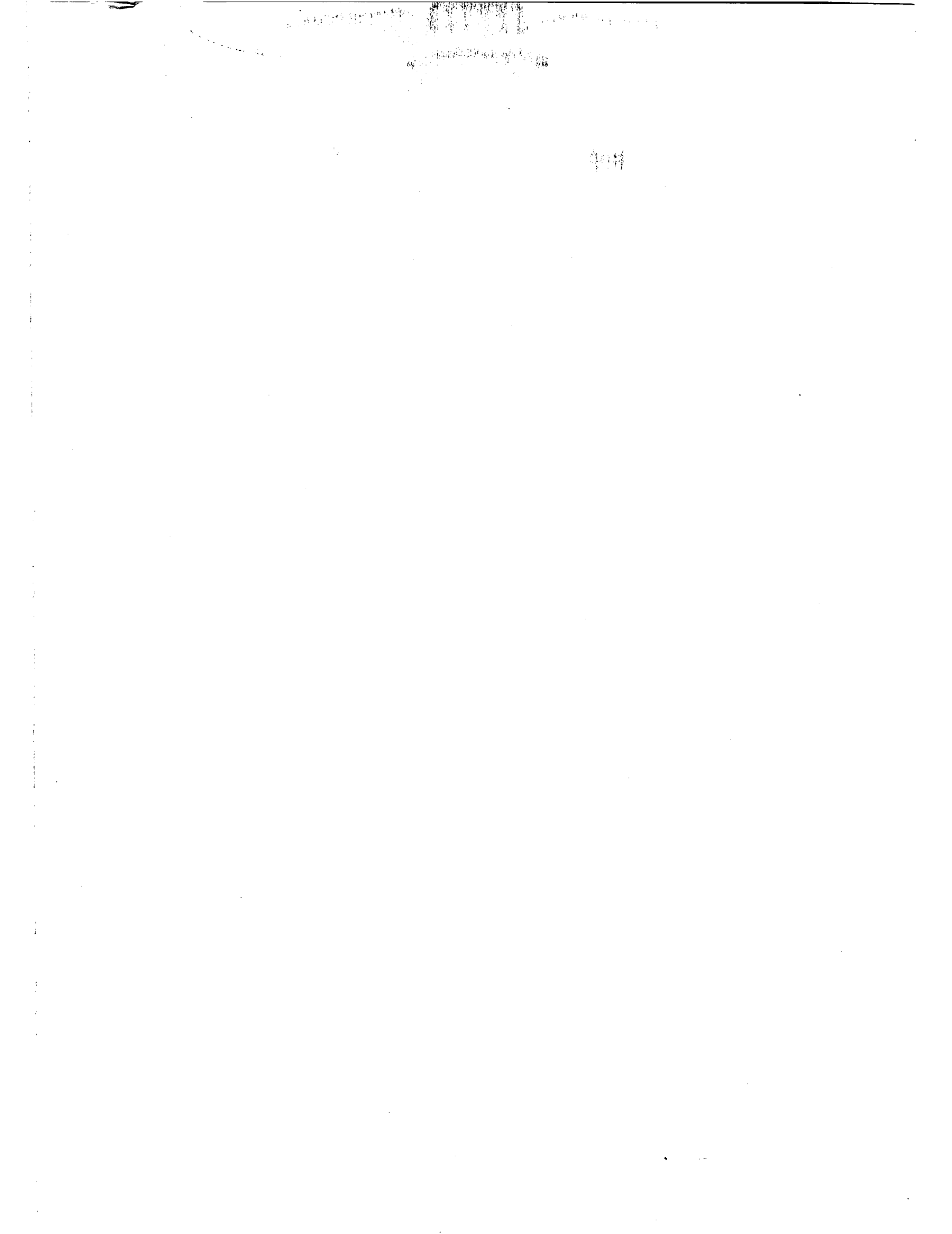


Figure E-1. Basic curves for plan CSP-1. From H.F. Dodge, "Skip Lot Sampling Plan," Industrial Quality Control, February 1955, Taken from Hanson 1963.



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