

From: [Amy Minor](#)
To: cstanifer@dnr.IN.gov
Cc: [Trefethen, Jean](#); [Lemont, Stephen](#)
Subject: FW: REQUEST FOR INFORMATION REGARDING SENSITIVE SPECIES AND CRITICAL HABITAT FOR THE PROPOSED DECOMMISSIONING AND LICENSE TERMINATION OF THE JEFFERSON PROVING GROUND FACILITY
Date: Wednesday, February 04, 2015 12:02:36 PM
Attachments: [r003.JPG_EOSearch.pdf](#)
[r003.JPG_EOData.pdf](#)

Dear Christie Stanifer,

Thank you for your helpful information when we spoke in December about the EIS that the Nuclear Regulatory Commission (NRC) is developing to evaluate a proposed license termination at the Jefferson Proving Ground Depleted Uranium Impact Area.

As shown below and as attachments, I did follow up with Ron Hellmich, and he provided us with the state species in the project area. His cover letter indicates to contact you with more information on these species, should it be needed for our analysis. At this time, I do not have any questions regarding species. Do you expect to receive our draft determination of potential impacts on state species once we have finished our initial assessment? Please let me know if there is any additional information that you need from NRC, or that NRC may need from your office during the EIS process.

Thank you and have a great day,

Amy Hester Minor
Research Scientist
Center for Nuclear Waste Regulatory Analyses
Southwest Research Institute
6220 Culebra Road
San Antonio, TX 78238
210.522.5750
<http://www.ged.swri.org/>

From: Hellmich, Ron [<mailto:rhellmich@dnr.IN.gov>]
Sent: Tuesday, January 06, 2015 11:04 AM
To: Amy Minor
Subject: RE: REQUEST FOR INFORMATION REGARDING SENSITIVE SPECIES AND CRITICAL HABITAT FOR THE PROPOSED DECOMMISSIONING AND LICENSE TERMINATION OF THE JEFFERSON PROVING GROUND FACILITY

Amy Minor,

Attached are the response letter and data sheets for the former Jefferson Proving Ground. For more information about the animal species mentioned, you should contact Christie Stanifer, DNR Fish and Wildlife which has the authority for animals. Her contact information is included in the letter.

Sincerely,

Ronald Hellmich

Indiana Natural Heritage Data Center
IDNR Nature Preserves
317-232-8059

From: Amy Minor [<mailto:aminor@swri.org>]

Sent: Tuesday, December 23, 2014 3:11 PM

To: Hellmich, Ron

Subject: REQUEST FOR INFORMATION REGARDING SENSITIVE SPECIES AND CRITICAL HABITAT FOR THE PROPOSED DECOMMISSIONING AND LICENSETERMINATION OF THE JEFFERSON PROVING GROUND FACILITY

Dear Mr. Hellmich:

By letter dated August 28, 2013, the U.S. Department of the Army (Army) submitted to the U.S. Nuclear Regulatory Commission (NRC) a Decommissioning Plan and Environmental Report for NRC source material license SUB-1435. License SUB-1435 is for possession of depleted uranium (DU) at a site known as the DU Impact Area within the former Jefferson Proving Ground in southeastern Indiana. The Army is requesting the termination of its license under restricted release. The application documents are available electronically at <http://pbadupws.nrc.gov/docs/ML1425/ML14252A127.html>. A map of the DU impact area within the JPG is attached to this email.

Please provide any information that you have concerning the presence of state endangered, threatened, or sensitive species or critical habitat in the JPG area. After assessing the information provided by you, the NRC staff will determine what additional actions are necessary to comply with the National Environmental Policy Act process.

Please contact Jean Trefethen at (301) 415-0867 or by email at Jean.Trefethen@nrc.gov, or Amy Minor at (210) 522-5750 or by email at aminor@swri.org, if you have any questions or comments for the NRC staff.

Sincerely,

Amy Hester Minor
Research Scientist
Center for Nuclear Waste Regulatory Analyses
Southwest Research Institute
6220 Culebra Road
San Antonio, TX 78238
210.522.5750
<http://www.ged.swri.org/>



Indiana Department of Natural Resources

Michael R. Pence Governor
Cameron F. Clark, Director

Division of Nature Preserves
402 W. Washington St., Rm W267
Indianapolis, IN 46204-2739

January 6, 2015

Amy Hester Minor
Research Scientist
Center for Nuclear Waste Regulatory Analyses
Southwest Research Institute
6220 Culebra Road
San Antonio, TX 78238

Dear Amy Minor:

I am responding to your request for information on the endangered, threatened, or rare (ETR) species, high quality natural communities, and natural areas documented from the former Jefferson Proving Ground, including Big Oaks National Wildlife Refuge and Jefferson Proving Ground, Indiana. The Indiana Natural Heritage Data Center has been checked and included you will find information on the ETR species documented within 1 mile of this project area.

For more information on the animal species mentioned, please contact Christie Stanifer, Environmental Coordinator, Division of Water, 402 W. Washington Room W264, Indianapolis, Indiana 46204, (317)232-4160.

The information I am providing does not preclude the requirement for further consultation with the U.S. Fish and Wildlife Service as required under Section 7 of the Endangered Species Act of 1973. If you have concerns about potential Endangered Species Act issues you should contact the Service at their Bloomington, Indiana office.

U.S. Fish and Wildlife Service
620 South Walker St.
Bloomington, Indiana 47403-2121
812-334-4261

At some point, you may need to contact the Department of Natural Resources' Environmental Review Coordinator so that other divisions within the department have the opportunity to review your proposal.

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For more information, please contact:

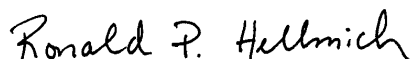
Department of Natural Resources
attn: Christie Stanifer
Environmental Coordinator
Division of Fish and Wildlife
402 W. Washington Street, Room W273
Indianapolis, IN 46204
(317)232-8163

Please note that the Indiana Natural Heritage Data Center relies on the observations of many individuals for our data. In most cases, the information is not the result of comprehensive field surveys conducted at particular sites. Therefore, our statement that there are no documented significant natural features at a site should not be interpreted to mean that the site does not support special plants or animals.

Due to the dynamic nature and sensitivity of the data, this information should not be used for any project other than that for which it was originally intended. It may be necessary for you to request updated material from us in order to base your planning decisions on the most current information.

Thank you for contacting the Indiana Natural Heritage Data Center. You may reach me at (317)232-8059 if you have any questions or need additional information.

Sincerely,



Ronald P. Hellmich
Indiana Natural Heritage Data Center

Enclosure: data sheet

01/06/15

Endangered, Threatened and Rare Species Documented Within 1
Mile of the Big Oaks National Wildlife Refuge and Jefferson Proving
Ground, Indiana

Type	Species Name	Common Name	Fed	State	Town Range	Date	Comments
Mammal	Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	007N010E 17 COMMON LINE	5/29/2007	
Bird	Ammodramus henslowii	Henslow's Sparrow		SE	005N010E 27 NEQ SWQ	7/9/2002	
Bird	Ammodramus henslowii	Henslow's Sparrow		SE	005N010E 10 SEQ SEQ	7/9/2002	
Bird	Circus cyaneus	Northern Harrier		SE	007N010E 20 SWQ SEQ	5/30/2002	
Bird	Cistothorus platensis	Sedge Wren		SE	005N010E 10 SEQ NEQ	7/9/2002	
High Quality Natural Community	Forest - flatwoods bluegrass till plain	Bluegrass Till Plain Flatwoods		SG	004N010E 08 WH SWQ	9/28/1994	
Vascular Plant	Juniperus communis	Ground Juniper		SR	004N010E 07 SWQ	1934-10	

BIG CREEK

Mollusk	Villosa lienosa	Little Spectaclecase		SSC	005N009E 23	7/18/2007	FRESH DEAD
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FALLS ON BACON SPRING BRANCH

Geologic Feature	Geomorphic - Nonglacial Erosional Feature - Water Fall and Cascade	Water Fall and Cascade			007N010E 36	2/17/2009	
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FALLS ON TRIBUTARY TO RAZOR FORK

Geologic Feature	Geomorphic - Nonglacial Erosional Feature - Water Fall and Cascade	Water Fall and Cascade			004N010E 1	2/17/2009	
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GRAHAM CREEK

Mollusk	Toxolasma lividus	Purple Lilliput		SSC	006N009E 12	7/29/2005	WEATHERED DEAD
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UPPER AND LOWER FALLS

Fed: LE = listed federal endangered; C = federal candidate species

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Type	Species Name	Common Name	Fed	State	Town Range	Date	Comments
Geologic Feature	Geomorphic - Nonglacial Erosional Feature - Water Fall and Cascade	Water Fall and Cascade			005N010E 14	2/17/2009	

BIG OAKS NATIONAL WILDLIFE REFUGE

Amphibian	Lithobates areolatus circulosus	Northern Crawfish Frog		SE	005N010E 11	3/30/2005	
Amphibian	Lithobates areolatus circulosus	Northern Crawfish Frog		SE	006N010E 6	3/30/2005	
Amphibian	Lithobates areolatus circulosus	Northern Crawfish Frog		SE	005N010E 27	3/30/2005	
Amphibian	Lithobates areolatus circulosus	Northern Crawfish Frog		SE	007N010E 34	3/30/2005	
Crustacea: Copepod	Diacyclops lewisi	Lewis' Groundwater Copepod		SE	006N010E 18	2/3/2001	
Crustacea: Copepod	Diacyclops lewisi	Lewis' Groundwater Copepod		SE	005N010E 7	2/3/2001	
Crustacea: Copepod	Diacyclops salisae	Salisa's Groundwater Copepod		SE	006N010E 31	2/3/2001	
Crustacea: Malacostra (Crayfish)	Crangonyx anomalus	Anomalous Spring Amphipod		ST	007N010E 31	3/11/2002	
Mammal	Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	005N010E 07 SWQ SWQ NWQ	8/3/1999	
Mammal	Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	005N010E 30	7/28/2000	
Mammal	Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	006N010E 16 SEQ SWQ SEQ	7/6/1998	
Mammal	Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	006N010E 30 COMMON LINE	7/19/1999	
Mammal	Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	006N010E 30 COMMON LINE	7/22/1999	
Mammal	Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	006N010E 07 SWQ SWQ NEQ	7/8/1999	
Mammal	Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	006N010E 30 COMMON LINE	7/23/1999	

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Type	Species Name	Common Name	Fed	State	Town Range	Date	Comments
Mammal	Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	005N010E 28 NH NWQ SWQ	6/30/1998	
Vascular Plant	Lygodium palmatum	Climbing Fern		SE	006N010E 19 NWQ NWQ	11/27/1999	
Vascular Plant	Lygodium palmatum	Climbing Fern		SE	007N010E 20	11/21/2011	
Vascular Plant	Oenothera perennis	Small Sundrops		SR	005N010E 23 SWQ NWQ	6/18/1992	
Bird	Dendroica cerulea	Cerulean Warbler		SE	007N009E 24	2002-06	
Bird	Helminthos vermivorus	Worm-eating Warbler		SSC	007N010E 20	2002-07	
Mammal	Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	007N010E 19 NWQ NEQ SWQ	5/28/2007	
Mammal	Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	007N010E 29 NEQ NWQ SWQ	7/31/1998	
Reptile	Clonophis kirtlandii	Kirtland's Snake		SE	006N010E 21 SEQ SWQ	9/1/2001	
Vascular Plant	Asplenium ruta-muraria	Wallrue Spleenwort		SR	007N010E 30 SEQ NWQ NEQ	4/24/1998	
Vascular Plant	Asplenium ruta-muraria	Wallrue Spleenwort		SR	007N010E 29 SWQ SEQ NWQ	7/20/1998	
Vascular Plant	Crotonopsis elliptica	Elliptical Rushfoil		SE	007N010E 30 NWQ SEQ NWQ	9/11/1992	
Vascular Plant	Crotonopsis elliptica	Elliptical Rushfoil		SE	007N010E 21 SWQ SWQ NWQ	7/10/1998	
Vascular Plant	Helianthus angustifolius	Swamp Sunflower		SE	005N010E 27 NWQ SEQ SWQ	10/2/1998	
Vascular Plant	Helianthus angustifolius	Swamp Sunflower		SE	005N010E 21 SWQ NEQ SEQ	10/2/1998	
Vascular Plant	Helianthus angustifolius	Swamp Sunflower		SE	005N010E 20 EH NEQ NEQ	8/27/1998	
Vascular Plant	Hypericum gymnanthum	Clasping-leaved St. John's-wort		SE	007N010E 21 SWQ NWQ	7/20/1998	
Vascular Plant	Linum striatum	Ridged Yellow Flax		WL	007N010E 26 SEQ SWQ NWQ	1992	
Vascular Plant	Lycopodiella inundata	Northern Bog Clubmoss		SE	006N009E 01 SEQ NEQ SEQ	8/12/1994	
Vascular Plant	Lycopodiella inundata	Northern Bog Clubmoss		SE	007N010E 20 SEQ SEQ NEQ	7/10/1998	

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Type	Species Name	Common Name	Fed	State	Town Range	Date	Comments
Vascular Plant	Lycopodium obscurum	Tree Clubmoss		SR	007N010E 23 NEQ SEQ NEQ	6/17/1998	
Vascular Plant	Lycopodium obscurum	Tree Clubmoss		SR	007N010E 14 NEQ NWQ SEQ	1992	
Vascular Plant	Lycopodium obscurum	Tree Clubmoss		SR	007N010E 21 SWQ NEQ SEQ	7/10/1998	
Vascular Plant	Lycopodium obscurum	Tree Clubmoss		SR	006N010E 06 SEQ SEQ NWQ	10/21/1998	
Vascular Plant	Lycopodium obscurum	Tree Clubmoss		SR	006N010E 23 NEQ NEQ	7/1/1992	
Vascular Plant	Lygodium palmatum	Climbing Fern		SE	007N010E 23 NEQ NEQ	8/19/1992	
Vascular Plant	Lygodium palmatum	Climbing Fern		SE	007N010E 32 NEQ NEQ	11/26/2000	
Vascular Plant	Lygodium palmatum	Climbing Fern		SE	007N010E 31 NEQ SWQ NWQ	11/11/1998	
Vascular Plant	Lygodium palmatum	Climbing Fern		SE	007N010E 22 NWQ SEQ SWQ	10/9/1998	
Vascular Plant	Oenothera perennis	Small Sundrops		SR	005N010E 35 NWQ NWQ	7/1/1992	
Vascular Plant	Oenothera perennis	Small Sundrops		SR	005N010E 21 SEQ	1998	
Vascular Plant	Oenothera perennis	Small Sundrops		SR	005N010E 18 SEQ SWQ	1998	
Vascular Plant	Oenothera perennis	Small Sundrops		SR	005N010E 30 SWQ SWQ	1998	
Vascular Plant	Oenothera perennis	Small Sundrops		SR	006N009E 12 SWQ SEQ NEQ	1998	
Vascular Plant	Oenothera perennis	Small Sundrops		SR	007N010E 32 SWQ SEQ NWQ	1998	
Vascular Plant	Oenothera perennis	Small Sundrops		SR	005N010E 23 SEQ SWQ	1998	
Vascular Plant	Oenothera perennis	Small Sundrops		SR	007N010E 30 NWQ	1998	
Vascular Plant	Oenothera perennis	Small Sundrops		SR	005N010E 21 SEQ SWQ	1998	
Vascular Plant	Oenothera perennis	Small Sundrops		SR	006N010E 05 NWQ NWQ NWQ	1998	
Vascular Plant	Oxalis illinoensis	Illinois Woodsorrel		WL	007N010E 18 SEQ NEQ NEQ	5/15/1998	
Vascular Plant	Panicum scoparium	Broom Panic-grass		SE	005N010E 21 NEQ SEQ	10/2/1998	

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Type	Species Name	Common Name	Fed	State	Town Range	Date	Comments
Vascular Plant	<i>Poa wolfii</i>	Wolf Bluegrass		SR	007N010E 17 NEQ SWQ NWQ	5/15/1998	
Vascular Plant	<i>Rhexia mariana</i> var. <i>mariana</i>	Maryland Meadow Beauty		ST	005N010E 20 NWQ NEQ NEQ	7/14/1998	
Vascular Plant	<i>Rhexia mariana</i> var. <i>mariana</i>	Maryland Meadow Beauty		ST	005N010E 21 NEQ SEQ SEQ & SEQ NEQ SEQ	10/2/1998	
Vascular Plant	<i>Rhexia mariana</i> var. <i>mariana</i>	Maryland Meadow Beauty		ST	005N010E 11 SWQ SWQ NWQ	6/30/1998	
Vascular Plant	<i>Rhexia mariana</i> var. <i>mariana</i>	Maryland Meadow Beauty		ST	005N010E 18 SWQ SEQ	7/14/1998	
Vascular Plant	<i>Rhexia mariana</i> var. <i>mariana</i>	Maryland Meadow Beauty		ST	005N010E 30 SWQ SWQ SWQ	7/14/1998	
Vascular Plant	<i>Sagittaria australis</i>	Longbeak Arrowhead		SR	007N010E 18 SWQ SWQ SWQ	1992	
Vascular Plant	<i>Sagittaria australis</i>	Longbeak Arrowhead		SR	007N010E 20 SEQ NWQ	7/14/1998	
Vascular Plant	<i>Sagittaria australis</i>	Longbeak Arrowhead		SR	005N010E 27 SWQ NWQ NWQ	7/27/1998	
Vascular Plant	<i>Sagittaria australis</i>	Longbeak Arrowhead		SR	005N010E 18 NWQ SWQ NWQ	8/27/1998	
Vascular Plant	<i>Scirpus purshianus</i>	Weakstalk Bulrush		SR	005N010E 18 NWQ SWQ NWQ	8/27/1998	
Vascular Plant	<i>Spiranthes vernalis</i>	Grassleaf Ladies'-tresses		WL	005N010E 31 SWQ SEQ	7/10/2003	
Vascular Plant	<i>Strophostyles leiosperma</i>	Slick-seed Wild-bean		ST	007N010E 16 NORTH PERIMETER ROAD	8/25/1998	
Vascular Plant	<i>Strophostyles leiosperma</i>	Slick-seed Wild-bean		ST	006N009E 12 SWQ SEQ NEQ	7/14/1998	
Vascular Plant	<i>Strophostyles leiosperma</i>	Slick-seed Wild-bean		ST	007N010E 20 SERANO-BRETT ROAD	9/21/1998	
Vascular Plant	<i>Strophostyles leiosperma</i>	Slick-seed Wild-bean		ST	005N010E 21 SEQ SEQ	10/2/1998	
Vascular Plant	<i>Strophostyles leiosperma</i>	Slick-seed Wild-bean		ST	007N010E 30 NWQ SEQ NWQ	9/11/1992	
Vascular Plant	<i>Waldsteinia fragarioides</i>	Barren Strawberry		SR	007N009E 25 SEQ NEQ NEQ	9/18/1998	
Vascular Plant	<i>Waldsteinia fragarioides</i>	Barren Strawberry		SR	007N010E 19 NEQ SWQ SWQ	4/7/1998	

Fed: LE = listed federal endangered; C = federal candidate species

State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SG = state significant; WL = Watch List; no rank - not ranked but tracked to monitor status

Type	Species Name	Common Name	Fed	State	Town Range	Date	Comments
Vascular Plant	Woodwardia areolata	Netted Chainfern		SR	007N010E 31 NEQ SWQ NWQ	7/10/1998	
Vascular Plant	Woodwardia areolata	Netted Chainfern		SR	006N010E 18 NWQ SEQ	7/22/1992	
Vascular Plant	Woodwardia areolata	Netted Chainfern		SR	007N010E 23 NEQ NEQ	8/19/1992	
Vascular Plant	Woodwardia areolata	Netted Chainfern		SR	006N010E 27 NEQ SEQ NEQ	10/2/1998	
Vascular Plant	Woodwardia areolata	Netted Chainfern		SR	007N009E 36 SWQ SWQ SEQ	9/15/1998	
Vascular Plant	Woodwardia areolata	Netted Chainfern		SR	006N010E 23 NEQ NEQ	6/11/1992	
Vascular Plant	Woodwardia areolata	Netted Chainfern		SR	006N010E 02 SWQ SEQ SEQ	9/21/1998	
Vascular Plant	Woodwardia areolata	Netted Chainfern		SR	006N010E 06 SEQ SWQ	10/21/1998	

ASA AND SARAH EDWARDS CAVE

Crustacea: Malacostra (Crayfish)	Caecidotea rotunda	Northeastern Cave Isopod		SR	007N010E 19	3/11/2002	
Platyhelminthes	Sphalloplana weingartneri	Weingartner's Cave Flatworm		WL	007N010E 19	3/11/2002	

AVCO ALLEY

Vascular Plant	Helianthus angustifolius	Swamp Sunflower		SE	005N010E 26 NWQ NEQ NWQ	7/27/1998	
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BALD EAGLE NEST BIG TIMBERS LAKE

Bird	Haliaeetus leucocephalus	Bald Eagle	LT, PDL	SSC	007N010E 22	3/22/2013	NEST
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BERNICE CHANDLER CAVE

Crustacea: Malacostra (Crayfish)	Caecidotea rotunda	Northeastern Cave Isopod		SR	007N010E 35	3/11/2002	
Insect Coleoptera	Atheta trogliphila			SR	007N010E 34	3/11/2002	
Platyhelminthes	Sphalloplana weingartneri	Weingartner's Cave Flatworm		WL	007N010E 34	3/11/2002	

BIG CREEK

Mammal	Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	005N010E 7	6/11/2007	
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CHARLES BEAR CAVE

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Type	Species Name	Common Name	Fed	State	Town Range	Date	Comments
Crustacea: Malacostraca (Crayfish)	Caecidotea rotunda	Northeastern Cave Isopod		SR	005N010E 7	3/11/2002	
DORMAN YEAGER CAVE							
Elliplura: Collembola (Springtails)	Pseudosinella fonsa	Fountain Cave Springtail		ST	005N010E 9	3/11/2002	
EDWARD PRENATT CAVE							
Crustacea: Malacostraca (Crayfish)	Caecidotea rotunda	Northeastern Cave Isopod		SR	005N010E 18	3/11/2002	
ELMER TURNER CAVE							
Insect Coleoptera	Atheta trogliphila			SR	005N010E 18	3/11/2002	
FALLING TIMBERS CREEK							
Vascular Plant	Sagittaria australis	Longbeak Arrowhead		SR	007N010E 17 SEQ SWQ	8/25/1998	
GATE 13 FLATWOODS							
Vascular Plant	Panax trifolius	Dwarf Ginseng		WL	007N010E 18 SWQ SWQ SWQ	4/14/1992	
GLEN AND FLORENCE SHOOTS CAVE							
Crustacea: Malacostraca (Crayfish)	Caecidotea rotunda	Northeastern Cave Isopod		SR	005N010E 7	3/11/2002	
GRACE BEAR SYCAMORE CAVE							
Crustacea: Malacostraca (Crayfish)	Caecidotea rotunda	Northeastern Cave Isopod		SR	005N010E 17	3/11/2002	
GRAHAM CREEK							
Mammal	Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	006N010E 4	5/24/2007	
GRAY'S CAVE							
Arachnida	Calymmaria cavicola	Cave Funnel-web Spider			005N010E 20	3/11/2002	
Platyhelminthes	Sphalloplana weingartneri	Weingartner's Cave Flatworm		WL	005N010E 20	3/11/2002	
HENRY DILK FALLS CAVE							
Crustacea: Copepod	Diacyclops indianensis	Indiana Groundwater		SE	005N010E 16	5/8/2001	

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Type	Species Name	Common Name	Fed	State	Town Range	Date	Comments
Insect	Coleoptera	Atheta trogliphila		SR	005N010E 16	3/11/2002	

HYDES POND

Vascular Plant	Najas gracillima	Thread-like Naiad		ST	006N010E 30 NWQ SEQ SWQ	8/25/1998	
Vascular Plant	Scirpus purshianus	Weakstalk Bulrush		SR	006N010E 30 NEQ SWQ SWQ & NWQ SEQ SWQ	8/25/1998	

JOHN AND DAISY SMITH CAVE

Crustacea: Malacostra (Crayfish)	Caecidotea rotunda	Northeastern Cave Isopod		SR	005N010E 9	3/11/2002	
Insect	Coleoptera	Atheta trogliphila		SR	005N010E 9	3/11/2002	

JOHN SAMPLE CAVE

Arachnida	Calymmaria cavicola	Cave Funnel-web Spider			005N010E 18	3/11/2002	
Ellioplura: Collembola (Springtails)	Sminthurides hypogramme	springtail		WL	005N010E 18	3/11/2002	

JPG AREA 66

Vascular Plant	Woodwardia areolata	Netted Chainfern		SR	005N010E 31 SEQ	7/10/2003	
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JPG NATURAL AREA #1

High Quality Natural Community	Forest - upland mesic	Mesic Upland Forest		SG	007N010E 18 CTR	1992	
Vascular Plant	Hydrastis canadensis	Golden Seal		WL	007N010E 18 NWQ SEQ NWQ	1992	
Vascular Plant	Panax quinquefolius	American Ginseng		WL	007N010E 18 NWQ SEQ NWQ	1992	

JPG NATURAL AREA #2

High Quality Natural Community	Forest - upland dry-mesic	Dry-mesic Upland Forest		SG	007N010E 19 NWQ	1992	
High Quality Natural Community	Forest - upland mesic	Mesic Upland Forest		SG	007N010E 19 NWQ	1992	

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Type	Species Name	Common Name	Fed	State	Town Range	Date	Comments
High Quality Natural Community	Primary - cliff limestone	Limestone Cliff		SG	007N010E 19 NWQ	1992	
JPG NATURAL AREA #3							
High Quality Natural Community	Forest - upland dry	Dry Upland Forest		SG	007N010E 19 SH	1992	
High Quality Natural Community	Forest - upland dry-mesic	Dry-mesic Upland Forest		SG	007N010E 19 SH	1992	
High Quality Natural Community	Forest - upland mesic	Mesic Upland Forest		SG	007N010E 19 SH	1992	
High Quality Natural Community	Primary - cliff limestone	Limestone Cliff		SG	007N010E 19 SH	1992	
JPG NATURAL AREA #4							
High Quality Natural Community	Forest - upland dry-mesic	Dry-mesic Upland Forest		SG	007N009E 24 SEQ	1992	
High Quality Natural Community	Forest - upland mesic	Mesic Upland Forest		SG	007N009E 24 SEQ	1992	
High Quality Natural Community	Primary - cliff limestone	Limestone Cliff		SG	007N009E 24 SEQ	1992	
JPG NATURAL AREA #5							
High Quality Natural Community	Forest - flatwoods bluegrass till plain	Bluegrass Till Plain Flatwoods		SG	007N010E 31 NEQ	1992	
JPG NATURAL AREA #6							
High Quality Natural Community	Forest - flatwoods bluegrass till plain	Bluegrass Till Plain Flatwoods		SG	006N010E 22 SWQ AND SH SH NWQ	1992	
Vascular Plant	Lycopodium obscurum	Tree Clubmoss		SR	006N010E 22 NWQ SWQ	6/30/1992	
Vascular Plant	Woodwardia areolata	Netted Chainfern		SR	006N010E 22 NWQ SWQ	6/30/1992	
KATHRYN BAYLESS CAVE							
Platyhelminthes	Sphalloplana weingartneri	Weingartner's Cave Flatworm		WL	005N010E 21	3/11/2002	

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Type	Species Name	Common Name	Fed	State	Town Range	Date	Comments
LITTLE GRAHAM CREEK							
Vascular Plant	Sagittaria australis	Longbeak Arrowhead		SR	006N010E 02 E2/3	8/27/1998	
LOUIS NEIL CAVE							
Crustacea: Malacostra (Crayfish)	Caecidotea rotunda	Northeastern Cave Isopod		SR	006N010E 9	3/11/2002	
LOWELL COOPER CAVE							
Crustacea: Malacostra (Crayfish)	Caecidotea rotunda	Northeastern Cave Isopod		SR	006N010E 16	3/11/2002	
MARY SPURGIN CAVE							
Crustacea: Malacostra (Crayfish)	Caecidotea rotunda	Northeastern Cave Isopod		SR	005N010E 17	3/11/2002	
OLD TIMBERS LAKE							
Vascular Plant	Sagittaria australis	Longbeak Arrowhead		SR	007N010E 27 SWQ NEQ SWQ	9/21/1998	
Vascular Plant	Scirpus purshianus	Weakstalk Bulrush		SR	007N010E 22 SEQ SEQ SWQ	9/21/1998	
OTTER CREEK							
Mollusk	Simpsonaias ambigua	Salamander Mussel		SSC	007N009E 26	9/3/1998	LIVE
Mollusk	Villosa lienosa	Little Spectaclecase		SSC	007N009E 26	11/9/2005	FRESH DEAD
SADIE AND JUANITA JINES CAVE							
Crustacea: Malacostra (Crayfish)	Caecidotea rotunda	Northeastern Cave Isopod		SR	005N010E 7	3/11/2002	
SMALL SPRING							
Crustacea: Malacostra (Crayfish)	Caecidotea rotunda	Northeastern Cave Isopod		SR	005N010E 21	3/11/2002	
THOMAS AND EFFIE JESSIE CAVE							
Crustacea: Malacostra (Crayfish)	Caecidotea rotunda	Northeastern Cave Isopod		SR	006N010E 17	3/11/2002	
THREE RAIDERS MONUMENT CAVE							

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Type	Species Name	Common Name	Fed	State	Town Range	Date	Comments
Crustacea: Malacostra (Crayfish)	Caecidotea rotunda	Northeastern Cave Isopod		SR	005N010E 9	3/11/2002	

TIMBER LODGE SPRING CAVE

Crustacea: Malacostra (Crayfish)	Caecidotea rotunda	Northeastern Cave Isopod		SR	007N010E 34	3/11/2002	
Platyhelminthes	Sphalloplana weingartneri	Weingartner's Cave Flatworm		WL	007N010E 34	3/11/2002	

JEFFERSON PROVING GROUNDS

Vascular Plant	Oenothera perennis	Small Sundrops		SR	005N010E 33 SWQ	6/18/1992	
Vascular Plant	Woodwardia areolata	Netted Chainfern		SR	005N010E 34 SEQ SWQ	6/18/1992	
Bird	Aimophila aestivalis	Bachman's Sparrow			004N010E 06	5/5/1988	
Bird	Ammodramus henslowii	Henslow's Sparrow		SE	005N010E 33 SWQ NEQ	7/9/2002	
Bird	Ammodramus henslowii	Henslow's Sparrow		SE	004N010E 06	1993-SU	
Bird	Coragyps atratus	Black Vulture			005N010E 32 SH NEQ NEQ	7/13/2002	
Bird	Wilsonia citrina	Hooded Warbler		SSC	005N010E 31	2004-06	
Vascular Plant	Lygodium palmatum	Climbing Fern		SE	004N010E 03 NEQ	8/19/2003	

JEFFERSON PROVING GROUNDS TRACT

Vascular Plant	Lilium canadense	Canada Lily		SR	005N010E 31	2011-08	
Vascular Plant	Lygodium palmatum	Climbing Fern		SE	004N010E 6	10/1/2011	
Vascular Plant	Oenothera perennis	Small Sundrops		SR	005N010E 31	2011-07	
Vascular Plant	Strophostyles leiosperma	Slick-seed Wild-bean		ST	005N010E 31	2011-08	
Vascular Plant	Woodwardia areolata	Netted Chainfern		SR	004N010E 6	2011-08	

JPG AREA 66

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Type	Species Name	Common Name	Fed	State	Town Range	Date	Comments
Vascular Plant	Rhexia mariana var. mariana	Maryland Meadow Beauty		ST	005N010E 31 SEQ SEQ	2011-08	
YOUNG WOODS							
Reptile	Clonophis kirtlandii	Kirtland's Snake		SE	004N010E 06 NEQ	8/18/1985	

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