

**RARE, THREATENED OR ENDANGERED SPECIES
THAT OCCUR IN FAIRFAX AND LOUDOUN COUNTIES, VIRGINIA
Washington Dulles International Airport
Environmental Impact Statement**

Common Name	Scientific Name	Federal Status	State Status/Rank
Vascular Plants			
Earleaf Foxglove	<i>Agalinis auriculata</i>	-	S1
Short's Rockcress	<i>Arabis shortii</i>	-	S2
White Heath Aster	<i>Aster ericoides</i>	-	S2
River Bulrush	<i>Bolboschoenus fluviatilis</i>	-	S1
Blue-Hearts	<i>Buchnera americana</i>	-	S1,S2
Carolina Fanwort	<i>Cabomba caroliniana</i>	-	S1
Crested Sedge	<i>Carex cristatella</i>	-	S2
Epiphytic sedge	<i>Carex decomposita</i>	-	S2
Lake-Bank Sedge	<i>Carex lacustris</i>	-	S1
Straw Sedge	<i>Carex straminea</i>	-	S1
Slender Sedge	<i>Carex tenera</i>	-	S1
A Sedge	<i>Carex vestita</i>	-	S2
A Field Chickweed	<i>Cerastrium arvense ssp velutinum</i>	-	S2
Tall Thistle	<i>Cirsium altissimum</i>	-	SH
A Hawthorn	<i>Crataegus pruinosa</i>	-	S2
Button-Bush Dodder	<i>Cuscuta cephalanthi</i>	-	S1
Smartweed Dodder	<i>Cuscuta cephalanthi</i>	-	S2
Showy tick-trefoil	<i>Desmodium canadense</i>	-	S1
A Beakgrain	<i>Diarrhena obovata</i>	-	S1
Wild Mock-Cucumber	<i>Echinocystis lobata</i>	-	S1
Flat-Stemmed Spike-Rush	<i>Eleocharis compressa</i>	-	S2
False Rue-Anemone	<i>Enemion biternatum</i>	-	S1
Parker's Pipewort	<i>Eriocaulon parkeri</i>	-	S2
Rattlesnake-Master	<i>Eryngium yuccifolium var yuccifolium</i>	-	S2
White Trout Lily	<i>Erythronium albidum</i>	-	S2
Yellow Avens	<i>Geum aleppicum</i>	-	SH
Rough Avens	<i>Geum laciniatum var Trichocarpum</i>	-	S2
Sweet-Scented Indian Plantain	<i>Hasteola suaveolens</i>	-	S2
McDowell Sunflower	<i>Helianthus occidentalis</i>	-	S1
Dwarf Bulrush	<i>Hemicarpha micrantha</i>	-	S1

Common Name	Scientific Name	Federal Status	State Status/Rank
Vetchling	<i>Lathyrus palustris</i>	-	S1
Loesel's twayblade	<i>Liparis loeselii</i>	-	S2
Winged Loosestrife	<i>Lythrum alatum</i>	-	S2
Ostrich Fern	<i>Matteuccia struthiopteris var pensylvanica</i>	-	S1
Grove Sandwort	<i>Moehringia lateriflora</i>	-	S1
Stiff Goldenrod	<i>Oligoneuron rigidum var rigidum</i>	-	S2
Virginia False-Gromwell	<i>Onosmodium virginianum</i>	-	S2
One-Sided Wintergreen	<i>Orthilia secunda</i>	-	SH
Yellow Nailwort	<i>Paronychia virginica var virginica</i>	SOC	S1
Hairy Beardtongue	<i>Penstemon hirsutus</i>	-	S2
Blue Scorpion-Weed	<i>Phacelia covillei</i>	SOC	S1
Downy Phlox	<i>Phlox pilosa ssp pilosa</i>	-	S2
Heart-Leaved Plantain	<i>Plantago cordata</i>	-	SH
Purple Fringeless Orchis	<i>Platanthera peramoena</i>	-	S2
Fowl Bluegrass	<i>Poa palustris</i>	-	S1,S2
Large-Leaf Pondweed	<i>Potamogeton amplifolius</i>	-	S1,S2
Flatleaf Pondweed	<i>Potamogeton robbinsii</i>	-	SH
Canada Plum	<i>Prunus nigra</i>	-	S1
Sand Cherry	<i>Prunus susquehanae</i>	-	S1
Torrey's Mountain-Mint	<i>Pycnanthemum torrei</i>	SOC	S2
Greenish-Flowered Wintergreen	<i>Pyrola chlorantha</i>	-	SH
Dwarf Chinquapin Oak	<i>Quercus prinoides</i>		S1
Water-Plantain Spearwort	<i>Ranunculus ambigens</i>	-	S1
Long-Stalked Crowfoot	<i>Ranunculus hederaceus</i>	-	SH
Smooth Azalea	<i>Rhododendron arborescens</i>	-	S2
Stalkless Yellowcress	<i>Rorippa sessiliflora</i>	-	S1
Sandbar Willow	<i>Salix exigua</i>	-	S1
Virginia Mallow	<i>Sida hermaphrodita</i>	SOC	S1
Snowy Campion	<i>Silene nivea</i>	-	S1
Sticky Goldenrod	<i>Solidago racemosa</i>	-	S1
Rock goldenrod	<i>Solidago rupestris</i>	-	S1
Freshwater Cordgrass	<i>Spartina pectinata</i>	-	S2
Yellow Nodding Ladies'-Tresses	<i>Spiranthes ochroleuca</i>	-	S1
White Heath Aster	<i>Spiranthes ericoides</i>	-	S1
Short's Aster	<i>Symphyotrichum shortii</i>	-	S1
Valerian	<i>Valeriana pauciflora</i>	-	S2
Sand Grape	<i>Vitus rupestris</i>	-	S1
Columbia Water-Meal	<i>Wolffia columbiana</i>	-	S1

Common Name	Scientific Name	Federal Status	State Status/Rank
Non-Vascular Plants			
Delicate Peatmoss	<i>Sphagnum subtile</i>	-	S1,S2
Birds			
Upland Sandpiper	<i>Bartramia longicaude</i>	-	S1B, SZN, LT
American Bittern	<i>Botaurus lentiginosus</i>	-	S1B, S2N
Common moorhen	<i>Gallinula chloropus</i>	-	S1B, S1N; SC
Bald Eagle	<i>Haliaeetus leucocephalus</i>	LT	S2,S3B, S3N; LT
Yellow-Crowned Night-Heron	<i>Nyctanassa violacea</i>	-	S2B,S3N; SC
Pied-Billed Grebe	<i>Podilymbus podiceps</i>	-	S2B, S3N
King Rail	<i>Rallus elegans</i>	-	S2B,S3N
Bivalvia (Mussels)			
Yellow Lance	<i>Elliptio lanceolata</i>	SOC	S2,S3; SC
Green Floater	<i>Lasmigona subviridis</i>	-	S2;SC
Coleoptera (Beetles)			
A Tiger Beetle	<i>Cicindela Formosa generosa</i>	-	SH
Black Lordithon Rove Beetle	<i>Lordithon niger</i>	-	SH
Crustacea (Amphipods, Isopods, and Decapods)			
Price's Cave Isopod	<i>Caecidotea pricei</i>	-	S2,S3
Bigger's Cave Amphipod	<i>Stygobromus biggersi</i>	-	S1,S2
Rock Creek Groundwater Amphipod	<i>Stygobromus kenki</i>	SOC	SH
Northern Virginia Well Amphipod	<i>Stygobromus phreaticus</i>	SOC	S1
Pizzini's Amphipod	<i>Stygobromus pizzinii</i>	-	S1,S2; SC
A Groundwater Amphipod	<i>Stygobromus sp 15</i>	SOC	S1
Lepidoptera (Butterflies and Moths)			
Frosted elfin	<i>Callophyrus irus</i>	-	S2
Hoary Elfin	<i>Callophrys polios</i>	-	S1,S3
Dotted Skipper	<i>Hesperia attalus slossonae</i>	-	SH
Erynnis Martialis	<i>Mottled duskywing</i>	-	S1,S3
Persius Duskywing	<i>Erynnis persius persius</i>	SOC	S1
Appalachian Grizzled Skipper	<i>Pyrgus wyandot</i>	SOC	S1,S2
Regal Fritillary	<i>Speyeria idalia</i>	-	S1
Odonata (Dragonflies and Damselflies)			
Martha's Pennant	<i>Celithemis Martha</i>	-	S2
Stripe-Winged Baskettail	<i>Epitheca costalis</i>	-	S2
Spine-Crowned Clubtail	<i>Gomphus abbreviatus</i>	-	S2,S3
Midland Clubtail	<i>Gomphus fratremus</i>	-	S1
Skillet Clubtail	<i>Gomphus ventricosus</i>	-	S1

Common Name	Scientific Name	Federal Status	State Status/Rank
Sphagnum sprite	<i>Nehalennia gracillis</i>	-	S2
Laura's Clubtail	<i>Stylurus laurae</i>	-	S2
Elusive Clubtail	<i>Stylurus notatus</i>	-	S1
Plecoptera (Stoneflies)			
Manassas Stonefly	<i>Acroneuria flinti</i>	SOC	SH
Reptiles			
Wood Turtle	<i>Glyptemys insculpta</i>	-	S2; LT
Turbellaria (Flatworms)			
A Groundwater Planarian	<i>Procotyla typhlops</i>	SOC	S1,S2
Holsinger's Groundwater Planarian	<i>Sphalloplana holsingeri</i>	SOC	SH
Bigger's Groundwater Planarian	<i>Sphalloplana subtilis</i>	SOC	SH

Legend:

S1 = Extremely rare and critically impaired in Virginia, with 5 or fewer occurrences or very few remaining individuals; vulnerable to extirpation in Virginia

S2 = Very rare and imperiled in Virginia, with 6 to 20 occurrences or few remaining individuals; vulnerable to extirpation

S3 = Rare to uncommon in Virginia, with 20 to 100 occurrences or few remaining individuals

S_B/S_N = Breeding and non-breeding status of an animal (primarily used for birds) in Virginia

SZ = A species with too irregular, transitory, or dispersed migration patterns to be reliably identified, mapped, or protected

SC = Species of Special Concern; animals that merit special concern according to the VDGIF; not a regulatory category

SH = Formerly part of Virginia's fauna with some expectation that it may be rediscovered

LT = Federal and State Listed Threatened; a species that is likely to become endangered within the foreseeable future

SOC = Federally listed Species of Concern; not a regulatory category

***Source: Virginia Department of Conservation and Recreation, Division of Natural Heritage, 2003**

----- Forwarded by Janet Frey/Gaithersburg/URSCorp on 03/25/2004 11:31 AM -----

"Don Schwab"

<SchwabD@dgif.state To:<Janet_Frey@URSCorp.com>
.va.us>

03/25/2004 11:02 AM

cc:"Shirl Dressler" <DresslerS@dgif.state.va.us>, "Ray Fernald"
<FernaldR@dgif.state.va.us>, "Mike Pinder" <PinderM@dgif.state.va.us>
Subject:ESSLog # 18864 Dulles Airport Expansion/Wood Turtles

Ms. Frey

I have reviewed the letter and attachments from Mr. Washington Bowie, dated March 22, 2004, concerning faunal surveys conducted in Cub Run in 2002/2003. I see no need of further surveys to be conducted and do not expect any adverse impacts to the species as long as BMPs for work along wetlands are followed. If you have any further questions let me know.

Donald J. Schwab, CWB
Wildlife Diversity Biologist, Region 1
Dept. of Game & Inland Fish. Herpetologist
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United States Department of the Interior



FISH AND WILDLIFE SERVICE

Ecological Services
6669 Short Lane
Gloucester, VA 23061

March 19, 2004

Ms. Kim Collini
URS Corporation
200 Orchard Ridge Drive, Suite 101
Gaithersburg, Maryland 20878

Re: Habitat Surveys at Dulles Airport,
URS #12001760, #2574, Stafford
County, Virginia

Dear Ms. Collini:

This responds to the continuing informal consultation between the U.S. Fish and Wildlife Service (Service) and URS Corporation on the referenced project. In the Service's July 3, 2001 letter, we indicated that appropriate habitat for the small whorled pogonia (*Isotria medeoloides*), federally listed threatened, may occur at this site.

On March 10, 2004, the Service received a copy of the survey report from conducted by EA Engineering, Science, and Technology. No individuals of small whorled pogonia were documented at the project site. Based on that survey report, it is the opinion of the Service that appropriate habitat for this species does not occur at the project site and therefore, this project is not likely to adversely affect the small whorled pogonia.

If project plans change or portions of the proposed project were not evaluated, it is the Service's recommendation that the changes and/or remainder of the project be submitted for our review. If you have any questions or need further assistance, please contact Kerry Linehan of this office at (804) 693-6694, extension 127.

Sincerely,

Karen L. Mayne
Supervisor
Virginia Field Office

W. Taylor Murphy, Jr.
Secretary of Natural
Resources



Joseph H. Maroon
Director

COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

203 Governor Street
Richmond, Virginia 23219-2010
TDD (804) 786-2121

11 March 2003

Mr. Washington Bowie, CEP
Deputy Project Manager
URS Corporation
4 North Park Drive, Suite 300
Hunt Valley, Maryland 21030

Re: URS Project 12003259: Proposed Construction of New Runways, Terminal Area Improvements, and Related Facilities at Washington Dulles International Airport, Sterling, Virginia

Dear Mr. Bowie,

The Department of Conservation and Recreation (DCR) has searched its Biological and Conservation Data System (BCD) for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

DCR would like to reiterate our July 2002 comments, "According to the "Survey for Rare, Threatened, and Endangered Species at the Proposed Tier 2 and Related Projects" conducted by EA Engineering, Science and Technology included in the Environmental Assessment, Appendix F, the Hairy Beardtongue (*Penstemon hirsutus*, G4/S2/NF/NS) was documented at three locations within the project boundaries; two adjacent to the proposed APM tunnel and one within the proposed stormwater management facility. These diabase glades are characterized by historically fire-dominated grassland vegetation on relatively nutrient-rich soils underlain by Triassic bedrock. Diabase flatrock, a hard, dark-colored volcanic rock, is found primarily in northern Virginia counties and is located within the geologic formation known as the Triassic Basin. Where the bedrock is exposed, a distinctive community type of drought-tolerant plants occurs. Diabase flatrocks are extremely rare natural communities that are threatened by activities such as quarrying and road construction (Rawinski, 1995).

An Agency of the Natural Resources Secretariat

In Northern Virginia, diabase supports other occurrences of several global and state rare plant species: earleaf foxglove (*Agalinis auriculata*, G2/S1/SOC/NS), white heath aster (*Aster ericoides*, G5/S2/NF/NS), blue-hearts (*Buchnera americana*, G3G4/S1/NF/NS), downy phlox (*Phlox pilosa*, G5T5/S2/NF/NS), stiff goldenrod (*Oligoneuron rigidum* var. *rigidum*, G5/S2/NF/NS), and marsh hedgenettle (*Stachys pilosa* var. *arenicola*, G5/S1/NF/NS). Please note that earleaf foxglove is currently tracked as a species of concern by the United States Fish and Wildlife Service (USFWS); however this designation has no official legal status.

Due to the potential for the proposed Tier 3 project sites to support additional populations of these natural heritage resources, DCR recommends an inventory of suitable habitat in the study area. With the survey results we can more accurately evaluate potential impacts to natural heritage resources and offer specific protection recommendations for minimizing impacts to the documented resources. DCR-Division of Natural Heritage biologists are qualified and available to conduct inventories for rare, threatened, and endangered species. Please contact J. Christopher Ludwig, Natural Heritage Inventory Manager, at (804) 371-6206 to discuss arrangements for field work.

In addition, the Cub Run Stream Conservation Units (SCUs) and the Upper Cub Run Conservation have been documented downstream of the project site. SCUs identify stream reaches that contain aquatic natural heritage resources, including 2 miles upstream and 1 mile downstream of documented occurrences, and all tributaries within this reach. Stream Conservation Units are also given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain. The Cub Run SCU has been ranked as a B3 conservation site, which indicates it is of high significance. The natural heritage resource associated with this site is:

Elliptio lanceolata

Yellow lance

G2G3/S2S3/NF/SC

The Yellow lance occurs in mid-sized rivers and second and third order streams. To survive, it needs a silt-free, stable streambed and well-oxygenated water that is free of pollutants. In Virginia, the yellow lance is currently known from populations in the Chowan, James, York, Rappahannock, and Potomac river drainages. Please note that the yellow lance is currently classified as a special concern species by the Virginia Department of Game and Inland Fisheries (VDGIF); however, this designation has no official legal status.

Considered good indicators of the health of aquatic ecosystems, freshwater mussels are dependent on good water quality, good physical habitat conditions, and an environment that will support populations of host fish species (Williams et al., 1993). Because mussels are sedentary organisms, they are sensitive to water quality degradation related to increased sedimentation and pollution. They are also sensitive to habitat destruction through dam construction, channelization, and dredging, and the invasion of exotic mollusk species.

Conservation sites are tools for representing key areas of the landscape that warrant further review for possible conservation action because of the natural heritage resources and habitat they support. Conservation Sites are polygons built around one or more rare plant, animal, or natural communities designed to include the element and, where possible, its associated habitat, and buffer or other adjacent land thought necessary for the element's conservation. Conservation

Sites are given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain. The Upper Cub Run Conservation Site has been ranked a B4 conservation site, which indicates it is of moderate significance. The natural heritage resource associated with this site is:

Clemmys insculpta

Wood Turtle

G4/S2/NF/LT

The wood turtle inhabits forested floodplains and nearby fields, wet meadows, and farmlands (Mitchell, 1994). As this species overwinters on the bottoms of creeks and streams, a primary habitat requirement is the presence of water (Mitchell, 1994). Please note that the wood turtle is classified as threatened by the Virginia Department of Game and Inland Fisheries (VDGIF).

Due to the legal status of the wood turtle, DCR recommends coordination with VDGIF. To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, DCR also recommends the implementation of and strict adherence to erosion and sediment control measures during all land disturbing activities.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the Virginia Department of Conservation and Recreation (DCR), DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

Any absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks additional natural heritage resources. New and updated information is continually added to BCD. Please contact DCR for an update on this natural heritage information if a significant amount of time passes before it is utilized."

For appropriate soil and water conservation be aware that federal agencies and their authorized agents conducting regulated land disturbing activities on private and public lands in the state must comply with the Virginia Erosion and Sediment Control Law and Regulations (VESCL&R), Virginia Stormwater Management Law and Regulations (VSWML&R), and other applicable federal nonpoint source pollution mandates (e.g. Clean Water Act-Section 313, Federal Consistency under the Coastal Zone Management Act). Clearing and grading activities, installation of staging areas, parking lots, roads, buildings, utilities, or other structures, soil/dredge spoil areas, or related land conversion activities that disturb 2,500 square feet or more would be regulated by VESCL&R and those that disturb one acre or greater would be covered by VSWML&R. Accordingly, federal agencies should prepare and implement erosion and sediment control (ESC) and stormwater management (SWM) plans to ensure compliance with state law. The federal agency is ultimately responsible for achieving project compliance through oversight of on site contractors, regular field inspection, prompt action against non-compliant sites, and/or other mechanisms consistent with agency policy. Federal Agencies are highly encouraged to contact DCR's Potomac Watershed Office (98 Alexandria Pike, Suite 33, Warrenton, Virginia 22186, telephone 540-347-96420) to obtain plan development or implementation assistance to ensure project conformance during and after active construction. [Reference: VESCL §10.1-567; VSWML §10.1-603.15]

Finally, based on the submitted information the proposed project is not anticipated to have any adverse impacts on existing or planned state recreational facilities. Nor will it impact on any streams on the National Park Service Nationwide Inventory, Final List of Rivers, potential Scenic Rivers or existing or potential State Scenic Byways.

Thank you for the opportunity to comment on this project.

Sincerely,

Derral Jones

Derral Jones

Planning Bureau Manager

CC: Ray Fernald, VDGIF

Kim Marbain, USFWS

Literature Cited

Mitchell, J. C. 1994. Reptiles of Virginia. Smithsonian Institution Press, Washington. pp. 88-91.

Rawinski, T.J. 1995. Natural communities and ecosystems: Conservation priorities for the future. Unpublished report for DCR-DNH

**Definition of Abbreviations Used on Natural Heritage Resource Lists
of the
Virginia Department of Conservation and Recreation**

Natural Heritage Ranks

The following ranks are used by the Virginia Department of Conservation and Recreation to set protection priorities for natural heritage resources. Natural Heritage Resources, or "NHR's," are rare plant and animal species, rare and exemplary natural communities, and significant geologic features. The primary criterion for ranking NHR's is the number of populations or occurrences, i.e. the number of known distinct localities. Also of great importance is the number of individuals in existence at each locality or, if a highly mobile organism (e.g., sea turtles, many birds, and butterflies), the total number of individuals. Other considerations may include the quality of the occurrences, the number of threats or disturbances, and threats. However, the emphasis remains on the number of populations or occurrences such that ranks will be an index of known biological rarity.

- S1 Extremely rare; usually 5 or fewer populations or occurrences in the state; or may be a few remaining individuals; often especially vulnerable to extirpation.
- S2 Very rare; usually between 5 and 20 populations or occurrences, or with many individuals in fewer occurrences; often susceptible to becoming extirpated.
- S3 Rare to uncommon; usually between 20 and 100 populations or occurrences; may have fewer occurrences, but with a large number of individuals in some populations; may be susceptible to large-scale disturbances.
- S4 Common; usually >100 populations or occurrences, but may be fewer with many large populations; may be restricted to only a portion of the state; usually not susceptible to immediate threats.
- S5 Very common; demonstrably secure under present conditions.
- SA Accidental in the state.
- S#B Breeding status of an organism within the state.
- SH Historically known from the state, but not verified for an extended period, usually > 15 years; this rank is used primarily when inventory has been attempted recently.
- SHN Non-breeding status within the state. Usually applied to winter resident species.
- SU Status uncertain, often because of low search effort or cryptic nature of the element.
- SX Apparently extirpated from the state.
- SZ Long distance migrant whose occurrences during migration are too irregular, transitory and/or dispersed to be reliably identified, mapped and protected.

Global ranks are similar, but refer to a species' rarity throughout its total range. Global ranks are denoted with a "G" followed by a character. Note that GA and GN are not used and GX means apparently extinct. A "Q" in a rank indicates that a taxonomic question concerning that species exists. Ranks for subspecies are denoted with a "T". The global and state ranks combined (e.g. G2/S1) give an instant grasp of a species' known rarity.

These ranks should not be interpreted as legal designations.

Federal Legal Status

The Division of Natural Heritage uses the standard abbreviations for Federal endangerment developed by the U.S. Fish and Wildlife Service, Division of Endangered Species and Habitat Conservation.

- LE Listed Endangered - threatened with extinction throughout all or a significant portion of its range
- LT Listed Threatened - likely to become endangered in the foreseeable future
- PE Proposed Endangered E(S/A) Treat as endangered because of similarity of appearance
- PT Proposed Threatened T(S/A) Treat as threatened because of similarity of appearance
- C Candidate - enough information is available to propose for listing, but listing is precluded by other pending proposals of higher priority
- SOC Species of Concern -- species that merit special concern (not a regulatory category)
- NF No federal legal status

State Legal Status

The Division of Natural Heritage uses similar abbreviations for State endangerment.

- LE Listed Endangered PE Proposed Endangered
- LT Listed Threatened PT Proposed Threatened
- C Candidate
- SC Special Concern -- animals that merit special concern according to VDGIF (not a regulatory category)
- NS No state legal status

Conservation Site Ranks

A rank is a rating of the significance of the conservation site based on presence and number of natural heritage resources; on a scale of 1-5, 1 being most significant:

- B1 - Outstanding significance
- B2 - Very high significance
- B3 - High significance
- B4 - Moderate significance
- B5 - of General Biodiversity significance

Site names coding in Habitat Zone are B5 sites on private lands.

For information on the laws pertaining to threatened or endangered species, contact: U.S. Fish and Wildlife Service for all FEDERALLY listed species; Department of Agriculture and Consumer Services Plant Protection Bureau for STATE listed plants and insects; Department of Game and Inland Fisheries for all other STATE listed animals.



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Ecological Services
6669 Short Lane
Gloucester, VA 23061

July 3, 2001

Dr. J. Charles Baummer, Jr.
Metropolitan Washington Airports Authority
Ronald Reagan Washington National Airport
Washington, DC 20001-4901

Re: Improvements to Washington Dulles
International Airport, Loudoun and
Fairfax Counties, Virginia

Dear Dr. Baummer:

The U.S. Fish and Wildlife Service (Service) has received your May 16, 2001 letter and your June 27, 2001 facsimile requesting information on federally listed species for the referenced project. The proposal is to make improvements to Washington Dulles International Airport, Loudoun and Fairfax Counties, Virginia. This letter is submitted in accordance with provisions of the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

The proposed action is to improve passenger handling facilities, provide additional gate capacity, construct a new air traffic control tower, and improve related facilities. The project description is not clear as to whether any of these improvements will require destruction of hardwood forests, which is habitat for the federally listed threatened small whorled pogonia, *Isotria medeoloides*. Appropriate habitat for this orchid is ordinary-looking, third-growth upland forests with an open understory on terrain that is almost level or gently to moderately sloping, but it has been found on steep slopes. Although the pogonia may be found more often on slopes with northerly or easterly exposures, all aspects with appropriate habitat may contain the pogonia. Small whorled pogonia sites can be generally characterized by their proximity to canopy openings, the presence of dead standing trunks, little herbaceous ground cover, and wood litter on the ground. The Service recommends a survey within appropriate habitat at the project site. Surveys should be conducted from June 1 through July 20 in your region of Virginia. Outside of these months, a site visit by a qualified individual can determine if appropriate habitat exists at the project site. A list of qualified pogonia surveyors is enclosed. Should you select a surveyor not already known by the Service to be qualified, the Service recommends you submit the proposed surveyor's qualifications at least 30 days prior to surveying.

If the proposed action does not contain any pogonia habitat modification, then the Service believes that the proposed action will have no effect on federally listed species.

Dr. Baummer

Page 2

If you have any questions or need further assistance concerning this project, please contact Mr. Eric Davis at (804) 693-6694, extension 104.

Sincerely,

Karen L. Mayne

Karen L. Mayne
Supervisor
Virginia Field Office

Enclosure

cc: VDCR, DNH (Rene Hypes)

SMALL WHORLED POGONIA (*Isotria medeoloides*) SURVEY CONTACTS

LISTED IN ALPHABETICAL ORDER

Ted Bradley
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George Mason University
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