

Proposed Compatibility Determination - Patuxent Research Refuge

USE: Hiking, Jogging, Bicycling, and Skiing by individuals (non-formal groups)

REFUGE NAME: Patuxent Research Refuge

ESTABLISHING AND ACQUISITION AUTHORITY(IES): Executive Order 7514, dated Dec. 17, 1936; Executive Order 11724, dated June 27, 1973; Migratory Bird Conservation Act; 16 U.S.C. 1534; 16 U.S.C. 667b - An Act Authorizing the Transfer of Certain Real Property for Wildlife; and Public Law 101-519, 104 Stat. 2247.

REFUGE PURPOSE(S): "...as a wildlife experiment and research refuge" - Executive Order 7514, dated Dec. 17, 1936;

"...recreation, conservation, wildlife preservation, and related scientific and educational activities"- Executive Order 11724, dated June 27, 1973;

"...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds - 16 U.S.C. 715d (Migratory Bird Conservation Act);

"...to conserve (A) fish or wildlife which are listed as endangered species or threatened species ... or (B) plants ..." 16 U.S.C. 1534;

"...particular value in carrying out the national migratory bird management program." 16 U.S.C. 667b (An Act Authorizing the Transfer of Certain Real Property for Wildlife, or other purposes); and

"...(b) The Secretary of the Interior shall administer the property transferred pursuant to subsection (a) consistent with wildlife conservation purposes and shall provide for the continued use of the property by Federal agencies to the extent such agencies are using it on the date of the enactment of this Act." Public Law 101-519, 104 Stat. 2247, dated Nov. 5, 1990.

NATIONAL WILDLIFE REFUGE SYSTEM MISSION: "To administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans." National Wildlife Refuge System Improvement Act of 1997.

DESCRIPTION OF USE:

Hiking, jogging, bicycling, and skiing (only when safety, weather, and snow conditions are favorable) are considered the primary use of the refuge's trail and roadway system when these uses are the sole intention of the visitor. Hiking, jogging, bicycling and skiing are not priority public uses, however, the refuge believes by allowing these uses, persons engaged will be exposed to the refuge and the refuge system which will foster an understanding of the mission of

the refuge and the National Wildlife Refuge System (Lyons 1982). The aforementioned activities have occurred on the refuge's North and South Tracts for the last 10 years. Hiking, jogging, and bicycling were found compatible in 1992 and skiing in 1996. The activities are managed in accordance with Standard Operating Procedures for North Tract Public Use Areas and the National Wildlife Visitor Center Trail System brochure. Hiking, jogging, bicycling and skiing are allowed on the following trails and roads: Wildlife Loop (8 miles); Green Trail (1.3 miles); Blue Trail (2.9 miles); Red Trail (1.7 miles); Yellow Trail (1.8 miles); Orange Trail (1.5 miles); Pine Trail (.75 mile); trail around Lake Allen (1.5 miles); and trail around Rieve's Pond (.5 mile). The following trails are open to hiking only: Little Patuxent River Trail (.75 mile); Forest Habitats Nature Trail (2.5 miles); trail around Cattail Pond (.5 miles); New Marsh Trail (.75 miles); Loop Trail (.3 miles); Goose Pond Trail (.2 miles); Cash Lake Trail (1.4 miles); Laurel Trail (.4 miles); Valley Trail (.6 miles); Fire Road Trail (.9 miles). The trails and roads found on the North Tract of the refuge are open to the public during normal operational hours which vary seasonally. The South Tract trails and roads are open to public use from sunrise until 5:30 pm throughout the year. The refuge trails and roads are open year-round with the exception of Thanksgiving, Christmas, and New Year's days. Portions of the road and trail system are temporarily closed to support priority public uses, wildlife management reasons, refuge operational needs, and during refuge specific hunting seasons.

Patuxent Research Refuge is located in the National Capital Region just below the fall line of the Patuxent River valley between the Northern Piedmont and the Upper Atlantic Coastal Plain. The majority of Patuxent's 12,790 acres is drained by the Big and Little Patuxent Rivers, which run through the refuge. A small portion of the refuge (southwest corner) is drained by the Anacostia River. Habitats types include old fields, upland forest, marshes, constructed wetlands, and water impoundments. The refuge provides habitat for at least 33 mammal species, 49 amphibians and reptiles, 25 orders of insects, and 250 bird species. The presence of the two rivers on the refuge provides a number of forested habitats including bottomland hardwoods and magnolia bogs.

The trail system was designed to support the six priority public uses and access all habitat types listed above. Persons engaged in hiking, jogging, biking and skiing will use existing access points, parking lots, signage, and refuge roads to access the trail system.

AVAILABILITY OF RESOURCES:

In recent years, the refuge has been open to hunting, fishing, wildlife viewing, interpretation, environmental education, and photography. Portions of the trail and roadway system were in existence when the land was transferred to the Service and in addition, the refuge has expanded the trails and roads in support of priority public uses. There is already existing refuge infrastructure such as, parking lots, signage, and other facilities which will serve to accommodate these activities. It is expected that the use of the trail and roadway systems by hikers, joggers, bikers, and skiers will slightly increase the general operating cost for personnel and maintenance of these facilities. To administer, maintain, and monitor the facilities would require 160 staff days. (See below)

Staff Cost

Task	Staff Days	Cost
Administration and management to facilitate activity	120	\$24,278.40/year
Maintenance of facilities	20	\$4046.40/year
Surveying facilities (to include Law Enforcement services)	20	\$4046.40/year

Total Staff Cost for these activities: \$32371.20

Cost of Supplies/Services

Cost of Supplies/Services

Maintenance of buildings, roadways, trails and parking areas	\$30000/year
Office supplies and support	\$5000/year
Operation of equipment	\$20000/year

Total Cost of Supplies and Services: \$55000

Total Cost: \$87371.20

ANTICIPATED IMPACTS OF THE USE:

The following are the anticipated short and long term impacts of hiking, jogging, bicycling, and skiing:

- The presence of vehicles and people hiking, jogging, biking, and skiing on refuge trails and roads can lead to displacement of animals from trails, although disturbance usually is a negligible influence on large mammal distributions and movements (Purdy et al. 1987; Boyle and Samson 1985). The effects on other forms of wildlife appear to be short term with the exception of breeding bird communities. A study by Miller, Knight, and Miller (1998) indicates that species composition and nest predation was altered adjacent to trails in both forested and grassland habitats. It appears that species composition changes are due to the presence of humans and not the trail or roadway itself. On the other hand, nest predation does appear to be a function of the trail which allows access to mammalian nest predators. The refuge has and will continue to close certain trails during the nesting season to protect breeding bird communities. The refuge will also continue its proven management strategies of educating trail and roadway users how their activities affect wildlife and how to modify their use to minimize impacts on wildlife (Miller, Knight, and Miller 1998).
- The use of trails and gravel roads could lead to soil compaction, exposure of tree roots, and the modification of plant species 3 to 6 feet on either side of the trail which is a function of soil compaction, invasive species, and direct trampling of plants (Kuss 1986). The refuge will continue its management practices of the use of boardwalks, woodchips, erosion control, and user education to protect plant species and habitats along trails and roadways. The refuge trail

and roadway system could pose a threat to endangered or threatened species if such were found utilizing habitat near trail or road locations. In this case, the trail/road would be closed or rerouted to ensure habitat protection. Potential conflict with priority public uses will be minimized by using trail head signs and other media to inform the various users about current public uses. Trail and roadway use will be restricted during the refuge-specific hunting seasons.

The refuge believes that with the proper management hiking, jogging, bicycling, and skiing will not result in any short or long term impacts that will adversely affect the purpose of the refuge or the mission of the National Wildlife Refuge System.

PUBLIC REVIEW AND COMMENT: A notice of this Compatibility Determination will be posted in a local newspaper with a wide distribution area. It will be posted at the National Wildlife Visitor Center and the North Tract Visitor Contact Station for 30 days.

DETERMINATION (CHECK ONE BELOW):

USE IS NOT COMPATIBLE
 USE IS COMPATIBLE WITH THE FOLLOWING STIPULATIONS

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:

- The refuge will continue to protect and manage wildlife and their habitat especially breeding and wintering bird communities found on the refuge through the use of education, signage, and trail/roadway closures.
- The refuge continues to monitor trail and road conditions to determine the trails effect on adjacent plant communities and the refuge will take all necessary steps to protect habitat. This would include but is not limited to; protecting soil from compaction, seasonal closure of trails, and relocating trails.
- All hikers, joggers, bikers, and skiers will be restricted to the designated trail and roadway system.
- The refuge's Step-down plan for Public Use will be developed to include a section on the management and administration of hiking, jogging, bicycling, and skiing on the refuge's trail and roadway system.

JUSTIFICATION:

The U.S. Fish and Wildlife Service and the National Wildlife Refuge System maintain goals of providing opportunities for wildlife viewing and photography. Allowing the use of the trail system by persons engaging in hiking, jogging, bicycling, and skiing for the sake of those activities will have the secondary chance to view wildlife and their habitats which would further the mission of the Service. These users may take the time to learn more about the refuge while they pursue their activity and become more avid supporters of the National Wildlife Refuge System.

Hiking, jogging, bicycling, and skiing would not materially interfere with or detract from the fulfillment of the Refuge System mission or the purposes of the refuge.

Literature Cited

Lyons, J.R. 1982. Nonconsumptive Wildlife-Associated Recreation in the U.S.: Identifying Other Constituency. Trans. N. Am. Wildl. And Nat. Resourc. Conf. 47:677-685.

North Tract Public Use Areas, Standard Operating Procedures North Tract

Patuxent Research Refuge National Wildlife Visitor Center Trail System,
<http://patuxent.fws.gov/NWVCTrails.html>

Purdy, Goff, Decker, Pomerantz, Connelly. 1987 A Guide to Managing Human Activity on a National Wildlife Refuge. New York Cooperative Fish and Wildlife Research Unit.

Boyle S.A., Samson F.B. 1985. Effects of Nonconsumptive Recreation on Wildlife: A Review .13:110-116.

Miller, S.G., Knight R. L., and Miller C. K. 1998. Influence of Recreational Trails on Breeding Bird Communities. pp. 162-169 (8)1 Ecological Applications

Kuss. F. 1986. A review of major factors influencing plant responses to recreation impacts. Environmental Management. 10:638-650

SIGNATURE: _____

REFUGE MANAGER: Brad Knudsen 9/03/04
(signature and date)

CONCURRENCE: _____

REGIONAL CHIEF: Anthony D. Lege 2/10/2005
(signature and date)

MANDATORY 10- OR 15-YEAR REEVALUATION DATE: ~~2012~~

2/10/2015

* Other refuges in RS may undertake a study of the impacts of jogging on refuge resources. It is expected that Patuxent RR will participate in such studies when they occur and modify jogging activities if study results indicate conflict with Refuge Purpose of the System Mission
Anthony D. Lege

MARIGELA CONSTANTINO

08/17/2004 02:39 PM

To: Holliday Obrecht/R5/FWS/DOI@FWS
cc:

Subject: Threatened & Endangered Species Review for Activities Occurring at Patuxent NWR

RE: Update and Renewal of Compatibility Determinations for Recreational Activities (dog training, camping, hiking, jogging, bicycling, horseback riding, and cross country skiing) Occurring at the Patuxent National Wildlife Refuge, Anne Arundel County, MD

Dear Mr. Obrecht:

This responds to your request for information on the presence of species which are federally listed or proposed for listing as endangered or threatened within the vicinity of the Patuxent National Wildlife Refuge. We have reviewed the information you enclosed and are providing comments in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

Except for occasional transient individuals, no federally proposed or listed endangered or threatened species are known to exist within the project impact area. Therefore, no Biological Assessment or further section 7 Consultation with the U.S. Fish and Wildlife Service is required. Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

This response relates only to federally protected threatened or endangered species under our jurisdiction. For information on the presence of other rare species, you should contact Lori Byrne of the Maryland Wildlife and Heritage Division at (410) 260-8573.

An additional concern of the Service is wetlands protection. Federal and state partners of the Chesapeake Bay Program have adopted an interim goal of no overall net loss of the Basin's remaining wetlands, and the long term goal of increasing the quality and quantity of the Basin's wetlands resource base. Because of this policy and the functions and values wetlands perform, the Service recommends avoiding wetland impacts. All wetlands within the project area should be identified, and if construction in wetlands is proposed, the U.S. Army Corps of Engineers, Baltimore District, should be contacted for permit requirements. They can be reached at (410) 962-3670.

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interests in these resources. If you have any questions or need further assistance, please contact me at the number below.

Maricela A. Constantino, Biologist
Threatened & Endangered Species Program
USFWS/Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, Maryland 21401
410-573-4542 (office); 410-269-0832 (fax)

NEPA COMPLIANCE CHECKLIST

Grant/Project Name: Patuxent Research Refuge

Toys

This proposal is; is not completely covered by categorical exclusion _____ in 516 DM 2, Appendix _____; and/or 516 DM 6, Appendix _____.

(check (✓) one) (Review proposed activities. An appropriate categorical exclusion must be identified before completing the remainder of the Checklist. If a categorical exclusion cannot be identified, or the proposal cannot meet the qualifying criteria in the categorical exclusion, or an extraordinary circumstance applies (see below), an EA must be prepared.)

Extraordinary Circumstances:

Will This Proposal (check (✓) yes or no for each item below):

- | Yes | No | |
|--------------------------|-------------------------------------|---|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1. Have significant adverse effects on public health or safety. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 2. Have significant adverse effects on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds (Executive Order 13186); and other ecologically significant or critical areas under Federal ownership or jurisdiction. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 3. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA Section 102(2)(E)]. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. Have a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 6. Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 7. Have significant adverse effects on properties listed or eligible for listing on the National Register of Historic Places as determined by either the bureau or office, the State Historic Preservation Officer, the Tribal Historic Preservation Officer, the Advisory Council on Historic Preservation, or a consulting party under 36 CFR 800. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 8. Have significant adverse effects on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant adverse effects on designated Critical Habitat for these species. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 9. Have the possibility of violating a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 10. Have the possibility for a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898). |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 11. Have the possibility to limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007). |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 12. Have the possibility to significantly contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112). |

(If any of the above extraordinary circumstances receive a "Yes" check (✓), an EA must be prepared.)

Yes No This grant/project includes additional information supporting the Checklist.

Concurrences/Approvals:

Project Leader: Brad Knudsen

Date: 9/03/04

Within the spirit and intent of the Council of Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA) and other statutes, orders, and policies that protect fish and wildlife resources, I have established the following administrative record and have determined that the grant/agreement/amendment:

- is a categorical exclusion as provided by 516 DM 6, Appendix 1 and/or 516 DM 2, Appendix 1. No further NEPA documentation will therefore be made.
- is not completely covered by the categorical exclusion as provided by 516 DM 6, Appendix 1 and/or 516 DM 2, Appendix 1. An EA must be prepared.

Service signature approval:

RO or WO Environmental Coordinator: _____ Date: _____

Staff Specialist, Division of Federal Assistance: _____ Date: _____

(or authorized Service representative with financial assistance signature authority)

Public Notice
Patuxent Research Refuge

The U.S. Fish and Wildlife Service (Service) is evaluating hiking, jogging, bicycling, and skiing by individuals (non-formal groups) on the Patuxent Research Refuge. The North Tract and the South Tract of the refuge are equipped with a trail system designed to support the priority public uses of National Wildlife Refuges. Selected trails have been set aside to accommodate additional uses such as hiking, jogging, bicycling, and cross country skiing by individuals visiting the refuge.

Prior to allowing these uses to continue on the refuge, Federal law requires that the Service first determine that the proposed activity is a compatible use. A compatible use is a proposed or existing wildlife-dependant recreational use or any other use of a National Wildlife Refuge that, based on sound professional judgment, will not materially interfere with or detract from the fulfillment of the purposes for which the refuge was established and the National Wildlife Refuge System mission. The Service develops a compatibility determination to facilitate evaluation of proposed uses, including anticipated impacts and stipulations necessary to ensure compatibility. A draft compatibility determination is currently available for public review and comment.

The National Wildlife Refuge System mission is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans. The purposes for establishing the Patuxent Research Refuge are provided on the first page of the draft compatibility determination.

The Service would like to know what you think of these proposed refuge uses. All comment received within 30 days following the date of this notice will be considered in finalizing this compatibility determination. We hope to make a final decision on this proposed use within 30 days following closure of the public comment period.

To request a copy of the compatibility determination, learn the final decision regarding these proposed uses, or for more information, contact the Patuxent Research Refuge office at 410-674-4625 or find it on our website at Patuxent.fws.gov.

Comments should be received no later than 30 days following the date of this notice and letters should be addressed to: Brad Knudsen, Refuge Manager, Patuxent Research Refuge, 10901 Scarlet Tanager Loop, Laurel, MD 20708; by email at Richard_Potvin@fws.gov; or by telephone to Richard Potvin at 410-674-4625.
LL7/013 July 15 10959

OFFICE OF



PATUXENT PUBLISHING COMPANY

615 MAIN STREET, LAUREL, MARYLAND 20707

7/8

Laurel, Maryland

THIS IS TO CERTIFY, that the annexed advertisement of

was inserted in the *Laurel Leader*, a weekly newspaper published in Laurel, Prince Georges County, Maryland, once a week for 1 successive weeks before the 2nd day of July 2004, that is to say, the same was inserted in the issues of 7/1

PATUXENT PUBLISHING COMPANY

By

J. Wilkinson

LEGAL ADVERTISING

FOR PRINCE GEORGES COUNTY, IN EQUITY

Plaintiff

vs.

Defendant

CERTIFICATE OF PUBLICATION OF

note

Public Notice

Patuxent Research Refuge

The U.S. Fish and Wildlife Service (Service) is evaluating hiking, jogging, bicycling, and skiing by individuals (non-formal groups) on the Patuxent Research Refuge. The North Tract and the South Tract of the refuge are equipped with a trail system designed to support the priority public uses of National Wildlife Refuges. Selected trails have been set aside to accommodate additional uses such as hiking, jogging, bicycling, and cross country skiing by individuals visiting the refuge.

Prior to allowing these uses to continue on the refuge, Federal law requires that the Service first determine that the proposed activity is a compatible use. A compatible use is a proposed or existing wildlife-dependant recreational use or any other use of a National Wildlife Refuge that, based on sound professional judgment, will not materially interfere with or detract from the fulfillment of the purposes for which the refuge was established and the National Wildlife Refuge System mission. The Service develops a compatibility determination to facilitate evaluation of proposed uses, including anticipated impacts and stipulations necessary to ensure compatibility. A draft compatibility determination is currently available for public review and comment.

The National Wildlife Refuge System mission is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans. The purposes for establishing the Patuxent Research Refuge are provided on the first page of the draft compatibility determination.

The Service would like to know what you think of these proposed refuge uses. All comment received within 30 days following the date of this notice will be considered in finalizing this compatibility determination. We hope to make a final decision on this proposed use within 30 days following closure of the public comment period.

To request a copy of the compatibility determination, learn the final decision regarding these proposed uses, or for more information, contact the Patuxent Research Refuge office at 410-674-4625 or find it on our website at Patuxent.fws.gov.

Comments should be received no later than 30 days following the date of this notice and letters should be addressed to: Brad Knudsen, Refuge Manager, Patuxent Research Refuge, 10901 Scarlet Tanager Loop, Laurel, MD 20708; by email at Richard_Potvin@fws.gov; or by telephone to Richard Potvin at 410-674-4625.