Patuxent Research Refuge
Mandates

- Established in 1936 under the following purpose:

  - The purpose of Patuxent Research Refuge acquisition is, “to effectuate further the purposes of the Migratory Bird Conservation Act,” and to serve “as a wildlife experiment and research refuge.”

Initially, 2,670 acres of land were transferred from the Department of Agriculture. Additional lands have been added under other authorities and contributed to the original purpose of the refuge, bringing the total refuge size to 12,841 acres.
Priority Resources of Concern

- Mammals – 38 species, 7 MD SGCN (Eastern harvest mouse, Eastern red bat, least shrew, silver-haired bat)
- Amphibians & Reptiles – 55 species, 11 MD SGCN (Eastern box turtle, Eastern hog-nosed snake, Eastern spadefoot toad)
- Fish – 55 species, 14 MD SGCN (American shad, comley shiner, banded sunfish)
Priority Resources of Concern (Cont.)

- **Birds** – 248 species, 95 MD SGCN
- **Insects** – 25 orders, 47 dragonflies/damselflies MD SGCN
- **Plants** – 165 species trees/shrubs, 554 herbs/forbs; MD E 6 species, MD T 3 species
## Bird Priority Resources of Concern

<table>
<thead>
<tr>
<th>Bird Group</th>
<th>BCR 30 HH (#1 Priority)</th>
<th>BCR 30 H (#2 Priority)</th>
<th>PIF 44 1 (#1 Priority)</th>
<th>PIF 44 2 (#2 Priority)</th>
<th>MD WLD PLAN GCN Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waterbirds</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>(1 breeding)</td>
<td>(1 breeding)</td>
<td>(1 breeding)</td>
<td>(1 breeding)</td>
<td>(1 breeding)</td>
</tr>
<tr>
<td>Waterfowl</td>
<td>1</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(1 breeding)</td>
<td>(1 breeding)</td>
<td>(1 breeding)</td>
<td>(1 breeding)</td>
<td>(1 breeding)</td>
</tr>
<tr>
<td>Shorebirds</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Landbirds</td>
<td>5</td>
<td>22</td>
<td>13</td>
<td>13</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>(4 breeding)</td>
<td>(17 breeding)</td>
<td>(13 breeding)</td>
<td>(11 breeding)</td>
<td>(35 breeding)</td>
</tr>
</tbody>
</table>
Goal 1: Maintain and actively promote Patuxent Research Refuge as an “outdoor laboratory,” providing a diversity of wildlife and natural resource research opportunities on the refuge in such areas as landscape conservation, habitat fragmentation, climate change, and other emerging issues, as well as the more traditional types of wildlife research, including inventory and monitoring techniques, land management, and understanding ecological processes. Research that supports the overall Service mission, and evaluates the best methods for protecting natural resources throughout the National Wildlife Refuge System and other land management agencies will be a priority.
The CCP Goals

**Biological**

**Goal 2:** Protect, maintain, and restore, where possible, the biological integrity, diversity, and environmental health of *forested ecological communities* to provide habitat for species of conservation concern, including migratory birds, mammals, amphibians, reptiles, and invertebrates.

**Goal 3:** Protect, maintain, and restore, where possible, the biological integrity, diversity, and environmental health of *refuge aquatic habitats*, including the Patuxent, Little Patuxent, and Anacostia River Watersheds, and impoundments, to provide habitat for species of conservation concern, including fish, invertebrates, and plants.

**Goal 4:** Manage refuge *non-forested upland communities* to provide ecological structure, composition, and function to support native plants and wildlife, including species of conservation concern. Where appropriate, restore the biological integrity and diversity of these habitats.
The CCP Goals

Visitor Use

Goal 5: Provide high-quality recreation, environmental education, and interpretive programs to enhance refuge visitors’ understanding and appreciation of fish and wildlife conservation.

Goal 6: Provide high-quality hunting and fishing experiences for hunters and anglers.

Goal 7: Enhance partnerships with local communities and various organizations to garner support and promote refuge programs and resources.
Current Status of CCP

- Currently in public comment period which will end November 26th, 2012
- Final CCP/EA – January 2013
Issues

- Biological Integrity - focus on forest interior
- Support of research and PWRC
- Balancing uses on North Tract (hunting, wildlife observation, range use)
- Consideration for longer public hours
- Impoundment and Grassland Management
  - Fragmentation effects and management costs of maintaining impoundments and grasslands vs. benefits to species and research
Common to all alternatives

- Implement provisions of the Facilities Modernization Plan
- Develop a separate LPP with public and agency involvement in compliance with Service policy and the NEPA
- Work with NSA to improve condition and environmental management of shooting ranges
The Three Alternatives

- **Alternative A** is the “no action” alternative - continue our current management. It describes existing management priorities and activities, and serves as a baseline for comparing and contrasting Alternatives B and C.

- **Alternative B** is our preferred alternative - emphasizes restoration and management of specific refuge habitats to support migratory forest birds. It maintains some balance of forest, grassland and impoundment habitats.

- **Alternative C** is maximum forest restoration - includes keeping Cash Lake, Lake Allen, and Snowden Pond, but explores restoring the maximum number of impoundments and grasslands.
**Current Habitat Management**

A variety of open water, emergent marsh, green tree reservoir, gravel pits, and dynamically managed impoundments.

Maintain 2,700 acres of bottomland floodplain forest. Maintain 8,400 acres of upland forest.

Restoration of 132 acres of rare savannah habitat.

Provide shrubland habitat along 9 miles of powerline ROW.

Maintain 517 acres of grassland habitat (patches ranging from .5 to >50 acres).

<table>
<thead>
<tr>
<th>Habitat</th>
<th>Alt A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative</td>
<td>462 acres</td>
</tr>
<tr>
<td>Grassland/old field</td>
<td>517 acres</td>
</tr>
<tr>
<td>Shrub/early successional forest</td>
<td>224 acres</td>
</tr>
<tr>
<td>Oak-pine savannah</td>
<td>132 acres</td>
</tr>
<tr>
<td>Deciduous, pine and mixed forest</td>
<td>8,242 acres</td>
</tr>
<tr>
<td>Floodplain forest and swamp</td>
<td>1,946 acres</td>
</tr>
<tr>
<td>Floodplain shrub wetland</td>
<td>73 acres</td>
</tr>
<tr>
<td>Depressional forest wetland</td>
<td>752 acres</td>
</tr>
<tr>
<td>Depressional shrub wetland</td>
<td>6 acres</td>
</tr>
<tr>
<td>Emergent wetland</td>
<td>105 acres</td>
</tr>
<tr>
<td>Open water</td>
<td>370 acres</td>
</tr>
</tbody>
</table>
Current Public use

- Over 200,000 visits per year
- Hunting and fishing according to State and Refuge seasons and regulations
- Observation tower, wildlife drive, photography blind, and 25 miles of trails
- Volunteer and permanent staffing of two public entrances daily
- Friends group runs tram tours
- Extensive environmental education and interpretation programs
Alternative A Public Hunting

U.S. Fish and Wildlife Service

Patuxent Research Refuge
Anne Arundel and Prince Georges Counties, Maryland

DRAFT

Refuge Features
- National Wildlife Visitor Center
- Public Road
- Hunting Control Station
- Visitor Contact Station
- Refuge Boundary
- Private Inholding

Hunting Areas
- Central Tract Hunting Location
- Schafer Farm Hunting Area
- North Tract Hunting Area
- South Tract Hunting Areas
- No Hunting Area

Map Legend:
- 0 - 0.5 miles
- 0.5 - 1.5 miles
- 1.5 - 2 miles

Map Key:
- Red Star: National Wildlife Visitor Center
- Red Line: Public Road
- Green Line: Refuge Boundary
- Black Line: Private Inholding
- Orange Line: Central Tract Hunting Location
- Yellow Line: Schafer Farm Hunting Area
- Purple Line: North Tract Hunting Area
- Green Line: South Tract Hunting Areas
- Light Green Line: No Hunting Area

Map Legend Key:
- W: West
- E: East
- N: North
- S: South

Map Scale:
- 0 - 2 miles

Map Boundaries:
- Potomac River
- Patuxent River
- Other Rivers and Streams

Map Data Sources:
- U.S. Fish and Wildlife Service
- Maryland Department of Natural Resources

Map Notes:
- DRAFT version

Map Comment:
- Additional comments on map

Map Conclusion:
- Final conclusion on map

Map Reference:
- Other relevant references

Map Graphics:
- Map elements and annotations

Map Credits:
- Credit to map creators and contributors
Current Research

- Research SUPs case by case with PWRC scientists and non-staff research
  - Research refuge purpose
- Less research oriented toward land management in recent years
- Focus on pen complex and contaminant research
Alternative A Staffing
Alternative B: Habitat Management

**Service Preferred Alternative**

*(All strategies are in addition to Alternative A)*

<table>
<thead>
<tr>
<th>Habitat</th>
<th>Alt B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative</td>
<td>429 acres</td>
</tr>
<tr>
<td>Grassland/old field</td>
<td>256 acres</td>
</tr>
<tr>
<td>Shrub/early successional forest</td>
<td>261 acres</td>
</tr>
<tr>
<td>Oak-pine savannah</td>
<td>132 acres</td>
</tr>
<tr>
<td>Deciduous, pine and mixed forest</td>
<td>8,432 acres</td>
</tr>
<tr>
<td>Floodplain forest and swamp</td>
<td>2,210 acres</td>
</tr>
<tr>
<td>Floodplain shrub wetland</td>
<td>34 acres</td>
</tr>
<tr>
<td>Depressional forest wetland</td>
<td>759 acres</td>
</tr>
<tr>
<td>Depressional shrub wetland</td>
<td>5 acres</td>
</tr>
<tr>
<td>Emergent wetland</td>
<td>55 acres</td>
</tr>
<tr>
<td>Open water</td>
<td>255 acres</td>
</tr>
</tbody>
</table>

Allow 14 impoundments to revert to forest or floodplain forest; resulting in 197 acres of floodplain forest & 9 acres of upland forest.

Restore approximately 478 acres of forest.

Consolidate grasslands into large (>50 acre) blocks.

Scrub-shrub along powerline ROWs.

Savannah restoration area (132 acres).
Alternative B: Public Use

- Create additional NT trail (2.5 miles)
- Develop 4-6 new interpretive programs annually
- Create and offer historical interpretive tours on Central and North Tract
- Rehab and improve viewing tower at Wildlife Viewing Area
- Designate and develop an outdoor exploration area on the South Tract
- Increase Environmental Education by 10%
- Increase teacher workshops by 50%
- Require clean-up for horseback riding
- Allow virtual and no-impact geocaching
Alternative B: Public use (cont.)

- Increase youth and disability hunting opportunities
- Open trails with 50 yard buffer during deer bow season and small game season
- Open Blue Heron Pond to fishing
- Expand fishing hours on NT
- Expand calendar days for fishing at Cash Lake
- Expand hours for grounds and trails (dawn to dusk at NWVC)
Alternative B: Research

Same as Alternative A plus

- Develop and strengthen partnerships with USGS and other agencies, state partners, academic institutions, non-profit organizations and volunteers in the conservation community for research and monitoring needs
- Encourage landscape scale research (climate change, wildland urban interface, fragmentation)
Alternative C: Habitat Management

Approximately 750 acres revert to forest.

Convert 23 impoundments to floodplain forest.

Mostly gravel pit complexes and fishing areas remain.

Allow additional acres of scrub-shrub to succeed to forest.

Reduce grasslands to 71 acres.

Allow remaining grasslands to succeed to shrub or forest.

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<tbody>
<tr>
<td>Administrative</td>
<td>429 acres</td>
</tr>
<tr>
<td>Grassland/old field</td>
<td>71 acres</td>
</tr>
<tr>
<td>Shrub/early successional forest</td>
<td>243 acres</td>
</tr>
<tr>
<td>Oak-pine savannah</td>
<td>132 acres</td>
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<td>8,720 acres</td>
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<td>Floodplain shrub wetland</td>
<td>33 acres</td>
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<tr>
<td>Depressional forest wetland</td>
<td>708 acres</td>
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<tr>
<td>Depressional shrub wetland</td>
<td>5 acres</td>
</tr>
<tr>
<td>Emergent wetland</td>
<td>51 acres</td>
</tr>
<tr>
<td>Open water</td>
<td>202 acres</td>
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Alternative C: Public Use

- Explore fee options for refuge entry, programs, and activities
- Reduce interpretive programs and special events
- Eliminate horseback riding
- Eliminate dog walking
- Close some hunt areas seasonally to allow for other uses
- Eliminate January hunting except deer firearms season
## Comparison of Habitat Acres for All Alternatives

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We invite you to share comments about the draft plan. We will accept letters, faxes, phone calls, and emails. To be considered, all comments must be received or postmarked by November 26, 2012.

*Email*

northeastplanning@fws.gov (place “Patuxent CCP” in the subject line)

*Mail*

Bill Perry
300 Westgate Center Drive
Hadley, MA 01035

*Phone*

413/253.8688

*Fax*

413/253.8468 ATTN: Patuxent CCP
You may view and download the draft CCP/EA for Patuxent online @

http://www.fws.gov/northeast/planning/patuxent/ccphome.html