HIRST PONDS

NATURAL AREAS REGISTER SITE SUMMARY
AUGUST 20, 2019

County: Atlantic
Municipality: Galloway Township
Physiographic Province: Outer Coastal Plain
Acreage: 345 acres
Ownership: State
Land Use: The Register Site encompasses all of the New Jersey Natural Lands Trust’s Hirst Ponds Preserve. The entire property is pitch pine forest with more than 50 percent of the property being forested wetlands.

Reason for Inclusion of Area in the Natural Areas Register:

Hirst Ponds satisfies the criterion required for inclusion in the Natural Areas Register that the site must include rare species habitat or at least one ecological community, as defined at N.J.A.C. 7:5A-1.3. The Hirst Ponds Preserve includes habitat for a number of rare plant species. Pursuant to N.J.A.C. 7:5A-1.3, "Rare species habitat" means habitat for any plant and/or animal species listed, proposed or of candidate status by the Federal government as endangered or threatened throughout the United States pursuant to the Endangered Species Act of 1973, 16 U.S.C. §§ 1531 et seq., and its implementing regulations, 50 CFR §§ 17.11 and 17.12; any plant species listed as endangered or as a species of concern pursuant to N.J.S.A. 13:18-15.151 et seq. and its implementing rules, N.J.A.C. 7:5C; any animal species listed as endangered, threatened or as a priority wildlife species pursuant to N.J.S.A. 23:2A-1 et seq. and its implementing rules, N.J.A.C. 7:25-4; and any rare plant and/or animal species and/or ecological community recorded in the Natural Heritage Database.

Listing on the Register does not, in itself, alter land use or ownership, nor does it impose any regulatory authority.

The smaller of the two intermittent coastal plain ponds (Walz, et al., 2006) that comprise the preserve, Barkwoods Pond, contains occurrences of the globally imperiled, state endangered Hirst Brothers’ panic grass (Panicum (Dichanthelium) hirstii), state endangered Boykin’s lobelia (Lobelia boykinii) as well as two other rare plants, rose-color coreopsis (Coreopsis rosea), and
mudbank crown grass (*Paspalum dissectum*). It is also known for a historic occurrence of the state endangered slender arrowhead (*Sagittaria teres*). The larger pond, known as Labounsky Pond, sits at the southern end of the preserve and also contains occurrences of Hirst Brothers’ panic grass (*Panicum (Dichanthelium) hirstii*), Boykin’s lobelia (*Lobelia boykinii*), and five other rare plants: rose-color coreopsis (*Coreopsis rosea*), mudbank crown grass (*Paspalum dissectum*), narrow-leaf primrose-willow (*Ludwigia linearis*), floatingheart (*Nymphoides cordata*), and purple bladderwort (*Utricularia purpurea*).

The two ponds on this preserve collectively contain two of only four known occurrences of Hirst Brothers’ panic grass in New Jersey and of only eight known occurrences in the world. The species was discovered in Barkwoods Pond in 1958 and in Labounsky Pond in 1960 by Frank and Robert Hirst (Walz, 2012). The species was described as a plant new to science in 1961.

The species’ presence is sporadic and has not been observed at Barkwoods Pond since 1992 and at Labounsky Pond since 2003. This is not surprising, however, given that coastal plain intermittent ponds are inherently variable, with plants responding to hydrologic changes so that many years, or even decades, may elapse before conditions are again suitable.

In summary, the New Jersey Natural Heritage Database contains documented records for the following rare species in Hirst Ponds (New Jersey Department of Environmental Protection, 2019) and thus meets the criterion for inclusion in the Natural Areas Register.

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Panicum (Dichanthelium) hirstii</em></td>
<td>Hirst Brothers’ panic grass</td>
<td>SE</td>
</tr>
<tr>
<td><em>Lobelia boykinii</em></td>
<td>Boykin’s lobelia</td>
<td>SE</td>
</tr>
<tr>
<td><em>Coreopsis rosea</em></td>
<td>rose-color coreopsis</td>
<td>SC</td>
</tr>
<tr>
<td><em>Ludwigia linearis</em></td>
<td>narrow-leaf primrose-willow</td>
<td>SC</td>
</tr>
<tr>
<td><em>Paspalum dissectum</em></td>
<td>mudbank crown grass</td>
<td>SC</td>
</tr>
<tr>
<td><em>Nymphoides cordata</em></td>
<td>floatingheart</td>
<td>SC</td>
</tr>
<tr>
<td><em>Utricularia purpurea</em></td>
<td>purple bladderwort</td>
<td>SC</td>
</tr>
<tr>
<td><em>Strix varia</em></td>
<td>barred owl</td>
<td>ST</td>
</tr>
<tr>
<td><em>Hyla andersonii</em></td>
<td>Pine Barrens treefrog</td>
<td>ST</td>
</tr>
<tr>
<td><em>Ardea herodias</em></td>
<td>Great blue heron</td>
<td>SC (breeding)</td>
</tr>
<tr>
<td><em>Egretta thula</em></td>
<td>Snowy egret</td>
<td>SC (breeding)</td>
</tr>
</tbody>
</table>

Explanation of Status Codes: SE - Listed as State Endangered  
               ST - Listed as State Threatened  
               SC – Plant or Animal Species of Concern in New Jersey

References:

New Jersey Natural Heritage Program, Office of Natural Lands Management, Division of Parks and Forestry, New Jersey Department of Environmental Protection, Trenton, NJ.


New Jersey Department of Environmental Protection. 2019. New Jersey Natural Heritage Database, Division of Parks and Forestry, Office of Natural Lands Management, Trenton, NJ.


Approval:

I, Catherine R. McCabe, Commissioner of the New Jersey Department of Environmental Protection, subsequent to the recommendation of the Natural Areas Council dated August 20, 2019, and pursuant to the Natural Areas and Natural Areas System Rules at N.J.A.C. 7:5A-1.4, approve the listing of Hirst Ponds on the Register of Natural Areas as habitat for rare plant species.

\[\text{Date}\]

Catherine R. McCabe, Commissioner