

Draft Compatibility Determination

Use: Gathering of Wild Edibles for Personal Use

Refuge Name: Port Louisa National Wildlife Refuge

Establishing and Acquisition Authority(ies):

The Mark Twain National Wildlife Refuge (NWR), including the land area now managed as Port Louisa NWR, was established under the provisions of a Secretarial Order signed on August 1, 1958. Individual districts of the Mark Twain NWR were designated as separate National Wildlife Refuges in a reorganization change as part of the Comprehensive Conservation Plan (CCP) in 2004 when Port Louisa refuge was named. Much of the refuge consists of lands acquired in fee title by the U.S. Army Corps of Engineers that are managed as part of the refuge under a Cooperative Agreement between the Department of the Army and the Department of the Interior.

Establishing Authorities:

Refuge Recreation Act (16 U.S.C. 460k-1)

Migratory Bird Conservation Act (16 U.S.C. 715d)

Fish and Wildlife Coordination Act (16 U.S.C. -664)

Emergency Wetland Resources Act of 1986 (16 U.S.C. -3901(b) 100 Stat. 3583)

1985 Food Security Act

In addition, Port Louisa NWR includes the Iowa River Corridor Project (IRCP) which is a partnership between the U.S. Fish and Wildlife Service (Service); Iowa Department of Natural Resources (IDNR); and the USDA Natural Resources Conservation Service (NRCS). The partnership was established in 1993 following the great Midwest flood. As part of the IRCP, National Wildlife Refuge lands along the Iowa River in Benton, Iowa, and Tama Counties are managed by the IDNR through a Memorandum of Understanding. Authority for land acquisition for the IRCP is provided under the Emergency Wetland Resources Act of 1986 (P.L. 99-645).

Authority for this partnership is provided under Chapters 107.24 and 107.30, Code of Iowa; the Migratory Bird Conservation Act of 1929 as amended (16 U.S.C. 715-715r); Migratory Bird Hunting and Conservation Stamp Act of 1934 (48 Stat. 451), as amended (16 U.S.C. 718 et seq.); the Fish and Wildlife Act of 1956 (708 Stat. 1119), as amended (16 U.S.C. 742a-742j); the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 460 et seq.); National Wildlife Refuge System Administration Act of 1966, as amended (16 U.S.C. 668dd – 668ee); the Emergency Wetland Resources Act of 1986 (PL 99-645); the Emergency Supplemental Appropriations Act of 1994; and the National Wildlife Refuge System Improvement Act of 1997 (PL 105-57).

Refuge Purpose(s):

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

- "...shall be administered by (Secretary of the Interior) directly or in accordance with cooperative agreements...and in accordance with such rules and regulations for the conservation, maintenance, and management of wildlife, resources thereof, and its habitat thereon,..." 16 U.S.C. -664 (Fish and Wildlife Coordination Act)
- "...suitable for - (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species..." 16 U.S.C. 460k-1 (Refuge Recreation Act)
- "... the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions ..." 16 U.S.C. -3901(b), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986)
- "... for conservation purposes", (1985 Food Security Act in conjunction with the transfer of Farm Service Agency, formerly Farmers Home Administration, property)

IRCP purposes:

Under the acquisition authority of the Emergency Wetland Resources Act, the primary purposes of IRCP refuge lands are the conservation of the wetlands of the nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions.

The 1995 Environmental Assessment and Finding of No Significant Impact (USFWS) for land acquisition in the Iowa River Corridor Project noted four management purposes: (1) Providing habitat for migratory birds and endangered species; (2) Improving the natural diversity of the ecosystem through restoration and protection of floodplain habitat; (3) Providing an alternative to levee reconstruction and reclaiming damaged farmland; and (4) Increasing public opportunities for outdoor recreation, such as hunting or fishing, and environmental education compatible with the preceding purposes.

National Wildlife Refuge System Mission:

The mission of the National Wildlife Refuge System 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.

Description of Use:

The use is the gathering of wild edibles (specifically mushrooms, berries and nuts) for personal use. The National Wildlife Refuge System Improvement Act of 1997 did not identify gathering wild edibles as one of the six priority wildlife dependent recreational uses to be facilitated in the Refuge System. There is however a long-standing tradition of gathering mushrooms, nuts and berries from private and public land in Iowa and throughout the Midwest.

Where would the use be conducted?

Gathering of wild edibles, for personal use, would be allowed on all refuge divisions (existing and future acquisitions) unless specifically closed by the Refuge Manager. Fluctuating river conditions and difficult access to some areas limit where people can gather edibles.

When would the use be conducted?

Most of the use for gathering wild edibles is in the spring for morel mushrooms and in June for berries. The Refuge is open to public use sunrise to sunset. There is a fall closed period on some Divisions to provide sanctuary for migrating birds. During this time there is no public use allowed. The Louisa and Keithsburg Divisions are closed September 15 until January 1, and the Horseshoe bend Division is closed September 15 until December 1.

How would the use be conducted?

Gathering of wild edibles will be authorized and regulated according to provisions in 50 CFR and consistent with State regulations. Allowable means of access within refuge units include driving motorized vehicles on designated roads, hiking, canoeing, and motorized boating. Law enforcement patrols and compliance checks by refuge officers will be used to enforce the provisions of 50 CFR, Subchapter C, as applicable. Wild edibles that are gathered are for personal use only and cannot be sold commercially.

Why is the use being proposed?

Gathering wild edibles for personal use is not a priority public use on National Wildlife Refuge System lands as identified in the Refuge System Improvement Act of 1997. However gathering morel mushrooms in the spring is currently the most common edible that the public pursues. Berries and nuts are also gathered. Gathering wild edibles will be conducted to provide compatible recreational opportunities for visitors to enjoy the resource and to gain understanding and appreciation for fish and wildlife.

Availability of Resources:

Resources are available to administer this use. The Refuge has provided parking lots, kiosks, signs, and trails for public access and information. The staff already maintains refuge visitor facilities for other public uses and the gathering of wild edibles does not add the need for additional resources. Law enforcement is also already part of refuge resources for overall visitor services support.

Anticipated Impacts of the Use:

Allowing the gathering of wild edibles for personal use would pose minimal impacts on the purposes for which Port Louisa NWR was established. Access to the refuge would be by motorized vehicle on public roads and parking lots, and on foot beyond the roads and parking lots. Access to popular locations for gathering wild edibles is generally on foot and often by one person at a time. Large groups have not been observed collecting. Damage to habitat by walking is minimal and temporary. There is some temporary disturbance to wildlife due to human activity on the land. One impact to the refuge purpose could be disruption of wildlife breeding and rearing activities during spring and early summer, but the expected sporadic and limited use by the public should not create unreasonable impacts. Any unreasonable harassment of wildlife

would be grounds for the refuge manager to close the area to these uses or restrict the uses to minimize harm.

Litter is sometimes a problem around public use areas including areas where people congregate. Littering is not limited to this use, however, and refuge staff would be monitoring refuge roads, parking areas, etc. for litter, and cleaning up those areas regardless of the source of the litter. The added staff time to clean these areas is minimal.

The concern, therefore, is whether or not these disturbances are sufficient to adversely affect the subject purposes for which the refuge was established. Since gathering wild edibles for personal use is limited by access, weather, infestation of insects, and water levels, the major evaluation criteria will be the frequency of human presence.

Refuge-wide, gathering opportunities are limited to those areas that can be driven to or boated to and require limited walking. Most recreational gathering of wild edibles for personal use on Port Louisa NWR occurs near the headquarters on the Louisa Division, at Horseshoe Bend Division, and at the Iowa River Corridor. We estimate that 500 refuge visitors would spend time gathering wild edibles for personal use on the refuge. Since most people gather wild edibles on refuge units that are also used by other refuge users, we consider the potential impact from gathering wild edibles for personal use on the refuge to be minimal. There would be no cultural or historical resource impacts expected.

Generally, the nuts, berries, and mushrooms that people collect are easy to identify and not confused with any rare plants or plants that may be picked by mistake. Raspberries and blackberries are typically abundant and not impacted by collection. Wildflowers and woodland plants should not be impacted by mistaken collection or by disturbance.

The amount of gathering may remove food that otherwise would be available to wildlife. The quantity of mushrooms produced in a given year is closely tied to variations in temperature and moisture. In general, wet years produce more mushrooms and dry years fewer. Refuge lands occur within the floodplain where seasonal overbank flooding precludes mushroom growth during high water levels. After flood waters recede, the heavily saturated soil is not conducive to mushroom production. The temperature and moisture regime of Iowa provides conditions conducive to some mushroom production in most years. The irregular and episodic nature of mushroom production in Iowa means animals that consume mushrooms do so in an opportunistic fashion. There are no species of animals in Iowa known to be dependent on mushrooms as a food source.

Some concern regarding mushroom picking originated in the Pacific Northwest where climate and vegetative cover favor mushrooms, including a number of rare species associated with old growth forests. There, collection of large quantities of mushrooms for commercial use is common and has resulted in greater research and regulation to promote sustainable harvesting practices and protection of rare species. Commercial gathering of mushrooms is prohibited within the refuge, but the information developed in the Pacific Northwest is helpful in guiding refuge policy on mushroom picking because it pertains to a number of widely distributed edible mushroom species, including several found in Iowa. One important finding based on a number of

small scale studies, shows that careful commercial-level mushroom harvesting does not diminish subsequent fruiting (Pilz et al. 2003). This supports the conclusion that the lower harvest levels associated with personal use mushroom picking have little effect on the amount of mushrooms available to wildlife.

Another consideration is the history and duration of human gathering of mushrooms. Archaeological evidence from within the Refuge shows it has been inhabited by humans for more than 12,000 years. Many of the early inhabitants relied heavily on wild plants for food. It is reasonable to conclude that they harvested mushrooms when available and that permitting individual gathering today for personal use is consistent with the history of the area and provides people with a means of gathering native foods that are healthy and sustainable.

Public Review and Comment:

Gathering of wild edibles was previously determined compatible in 2004 and is now being revised under the mandatory re-evaluation time period. The IRCP was not included in the 2004 Compatibility Determination but is included here.

A draft of this Compatibility Determination will be available for public review and comment for 14 days at the Refuge Office in April 2016. The document will also be available for public review on the Refuge's webpage, through local media outlets, and notices posted at libraries.

Determination:

_____ Use is Not Compatible

 X Use is Compatible with Following Stipulations:

Stipulations Necessary to Ensure Compatibility:

1. All fires are prohibited.
2. Gathering for commercial use is prohibited.

Justification:

Gathering wild edibles for personal use is a non-priority recreational use of the Refuge System. This use has been determined compatible at Port Louisa NWR because gathering will not materially interfere with or detract from refuge purposes. This activity facilitates the public appreciation of nature and the outdoors and provides opportunities to learn about the U.S. Fish and Wildlife Service. It also reinforces and enhances the public's understanding of the natural environment and of the need for fish and wildlife conservation.

Literature Cited

Pilz, David; Norvell, Lorelei; Danell, Eric; Molina, Randy. 2003. Ecology and management of commercially harvested chanterelle mushrooms. Gen. Tech. Rep. PNW-GTR-576. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 83 pages.

Refuge Manager: _____

Catherine J. Nigg

Date

Concurrence: _____

Sabrina Chandler, Refuge Supervisor

Date

Regional Chief: _____

Charles Blair, Refuge Chief

Date

Mandatory 10 or 15 year Re-evaluation Date: 2026