

**U.S. Department of the Interior
U.S. Fish and Wildlife Service**

**Cypress Creek
National Wildlife Refuge
Furbearer Management Plan**

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Abstract: The Furbearer Management Program at Cypress Creek National Wildlife Refuge (Refuge) focuses on beavers, muskrats, and raccoons. The program is designed to reduce impacts and damage to Refuge infrastructure and private property while providing a recreation opportunity during the state of Illinois trapping season. This document includes Refuge specific regulations and an overview for trapping throughout the Refuge.

Furbearer trapping has been a traditional use throughout southern Illinois and is an important element of wildlife management programs within the Illinois Department of Natural Resources (IDNR) as well as the National Wildlife Refuge system. The Refuge currently allows the take of nuisance animals by Refuge staff, licensed trappers, and partner resource agency staff through a Refuge Special Use Permit and Nuisance Trapping Permit issued by IDNR. Removal methods of nuisance animals (primarily beaver and muskrat) have included trapping or the use of firearms.

This Furbearer Management Plan allows trapping of beaver, muskrat and raccoon, using recreational trappers for resource management purposes. The opening of trapping seasons and trapping methods on the Refuge generally follow regulations established for the state of Illinois and special conditions within the Refuge Special Use Permit for trapping. Trap selection is based on best management practices (BMP) that ensure the welfare of trapped animals, avoid unintended captures of other non-target animals, and improve trapper safety. Based on BMPs, the Refuge permits the following traps to be used on target species:

- 1) Body-gripping Traps: Muskrats and Beavers
- 2) Dog-proof Leg-hold Trap: Raccoons

Guidance for authorizing furbearer management on the Refuge is provided by the National Wildlife Refuge System Improvement Act of 1997, Cypress Creek National Wildlife Refuge's Final Environmental Assessment (USFWS 1990) and Comprehensive Management Plan (USFWS 1996).

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I. INTRODUCTION

The Furbearer Management Plan was developed to manage specific wildlife species (beavers, muskrats, and raccoons) that impact refuge resources and infrastructure. The program also provides a compatible recreational and economic opportunity for the surrounding area. This plan provides a description of the trapping program and highlights the following considerations: biological soundness, economic feasibility, and effects on other refuge programs. The planning effort also includes an Environmental Assessment.

Cypress Creek National Wildlife Refuge (Refuge) was established on June 26, 1990 under the Emergency Wetlands Resources Act of 1986 (16 U.S.C. 3901 b, 100Stat.3583, PL 99 645). The Refuge is located in southern Illinois approximately 7 miles north of the confluence of the Ohio and Mississippi Rivers. It is situated along forty miles of the Cache River and its tributaries in Alexander, Johnson, Pulaski and Union counties (Appendix A)

The Refuge was established as a component of the New Madrid Wetland project which is part of the North American Waterfowl Management Plan. The Refuge provides important habitat for not only waterfowl, but also for a variety of wetland dependent shorebirds, wading birds and other wildlife. The Refuge acquisition boundary encompasses 35,529 acres along the Cache River from Highway 37 then west and south to Mound City, IL. This area is primarily rural and most of the land that is not forested is used for agriculture. Land for inclusion in the Refuge is acquired from willing sellers on a continual basis. Approximately 16,000 acres within the Refuge acquisition boundary have been purchased. The Refuge is divided into seven management units that differ in soils, hydrology, topography, land use and vegetative cover. These individual units are described briefly in Appendix B.

Conformance with Statutory Authority

The Refuge is managed and administered as part of the National Wildlife Refuge System, by U.S. Fish and Wildlife Service and the Department of Interior. The Refuge system operates under a variety of legal authorities, regulations and policies. The following federal legislative and administrative authorities and Service policies apply to trapping on refuge lands (USFWS, 1997):

- The National Wildlife Refuge System Improvement Act of 1997 recognizes that wildlife-dependent recreational uses involving hunting, fishing, wildlife observation, wildlife photography, environmental education and interpretation, when determined to be compatible, are a legitimate and appropriate uses of land within the National Wildlife Refuge System. Other uses not listed as priority public uses may be allowed if they are determined to be appropriate and compatible with the purposes for which the refuge was established.
- The Refuge Recreation Act (P.L. 87-714; 16 U.S.C. 460K-460k-4; 76 Stat. 653), as amended; which authorizes the Secretary of the Interior to administer refuges, hatcheries and other conservation areas for recreational use, when such uses do not interfere with the area's primary purposes.

- The Fish and Wildlife Act (16 U.S.C. 742a-742j; 70 Stat. 1119), as amended establishes a comprehensive national fish, shellfish, and wildlife resources policy with emphasis on the commercial fishing industry but also with a direction to administer the Act with regard to the inherent right of every citizen and resident to fish for pleasure, enjoyment, and betterment and to maintain and increase public opportunities for recreational use of fish and wildlife.
- Title 50 CFR 29.1 which provides for public or private economic use of the natural resources of any wildlife refuge.
- Title 50 CFR 31.2 which authorizes trapping as a method of surplus wildlife population control and disposal.

As practiced on refuges, trapping has been shown to have no adverse effect and may have beneficial effects (i.e. protection of habitat infrastructure or predator control for migratory bird protection) on the long-term stability and health of wildlife populations and their habitats (USFWS, 2012). The harvesting of wildlife on refuges is carefully regulated to ensure equilibrium between population levels and wildlife habitat. In addition to providing wildlife-dependent recreation opportunities, trapping will promote a better understanding and appreciation of Refuge habitats and their associated wildlife resources. Implementation of this plan is also supported by Cypress Creek National Wildlife Refuge's Comprehensive Management Plan (USFWS, 1996) and the Final Environmental Assessment which states that Refuge activities (i.e. restoration, management, etc.) could not contribute to flooding on private property or impede existing drainage (USFWS, 1990).

Refuge Goals

Cypress Creek National Wildlife Refuge was established in 1990 for the following purposes (U.S. Department of the Interior. 1990. Environmental Assessment, Cypress Creek National Wildlife Refuge):

...the conservation of 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., Sec. 3901 (b) (Emergency Wetlands Resources Act of 1986).

Cypress Creek National Wildlife Refuge's purpose and importance to migratory birds, particularly waterfowl, was further described in the U.S. Department of the Interior's Environmental Assessment for the proposed establishment of the Refuge (1990):

1) to protect, restore and manage wetlands and bottomland forest habitats in support of the North American Waterfowl Management Plan (NAWMP) 2) to provide resting, nesting, feeding and wintering habitat for waterfowl and other migratory birds 3) to protect endangered and threatened species and their habitats; 4) to provide for biodiversity 5) to protect a National Natural Landmark, 6) and to increase public opportunities for compatible recreation and environmental education.

The Furbearer Management program directly supports the protection, restoration and management of native habitats for waterfowl and associated wildlife species; biological diversity and resource infrastructure; as well as providing a compatible recreation opportunity.

II. CONSULTATION AND COORDINATION WITH THE STATE

Following the adoption of this plan, the Refuge will consult and coordinate with Illinois Department of Natural Resources (IDNR) to address annual implementation of trapping activities. Trapping opportunities on the Refuge are primarily developed to be consistent with IDNR state seasons and regulations (Appendix C) with the exception of more restrictive special conditions and species targeted for the furbearer management program (Appendix D).

As directed by Service Policy (605 FW2.7), the Refuge Furbearer Management program is planned, managed, conducted and evaluated in coordination with the IDNR in ways that conserve fish, wildlife, and their habitat, ensure trapper and visitor safety, comply with State and Federal laws and regulations and promote respect for the resource. Furthermore, this program adheres to the Refuge System trapping policy (Refuge Manual 7RM 15) that contains language related to implementing professional and humane trapping programs on refuges.

III. REFUGE ENVIRONMENT

Cypress Creek National Wildlife Refuge is located within the Cache River watershed in southernmost Illinois, situated along forty miles of the Cache River and its tributaries in Alexander, Johnson, Pulaski and Union county. The Cache River basin has traditionally been a waterfowl breeding, wintering and migration stop-over area in the Mississippi flyway. The Cache River – Cypress Creek Wetlands were designated as “wetlands of international importance – especially as waterfowl habitat” in 1996 under terms of the Ramsar Convention on wetlands by UNESCO (United Nations Educational, Scientific, and Cultural Organization).

Despite changes that have occurred over the years, the Refuge provides valuable habitat for migratory birds as well as numerous species of resident mammals, birds, reptiles, amphibians, and fish. Because of significant natural values and the potential for wetlands restoration, the Refuge was identified as a high priority for acquisition under the New Madrid Wetlands Project – a component of the Lower Mississippi Valley Joint Venture of the North American Waterfowl Management Plan (NAWMP). In 1994 the area, along with the Cache River State Natural Area was designated a "Wetland of International Importance" by the Ramsar Convention (1994) and an “Important Bird Area” by Audubon. The area also features a number of ecologically sensitive species and includes seven federally listed and 102 state listed threatened and endangered species. Broad habitat types within the Refuge include: wetlands, bottomland forests, and upland forests.

The Refuge, located in the Lower Cache River watershed, is comprised of four overlapping physiographic regions; the Upper East Gulf Coastal Plains, Ozarks, Mississippi River Alluvial Plain, and the Interior Low Plateau, and explains the biological diversity of the region.

The Cache River area is composed primarily of wetlands, bottomland forest, upland forest, and agricultural lands. Most of the area is subject to seasonal flooding and is wet during at least a portion of each year. The distribution of tree and woody shrub species are arrayed along geomorphic/topographic and hydrological gradients. Generally, a continuum of bald cypress/tupelo swamp, riverfront forest, bottomland hardwoods and terrace hardwood communities are present from the edge of the Cache River channel up to mixed hardwood mesic forests in uplands that bound the Cache River’s floodplain. Different community types are delineated within the refuge based on dominant species, elevation, and inundation (Table 1).

The Refuge includes 47 species of mammals. A few of the resident species attracted to river habitats include mink, muskrat, raccoon, river otter, opossums, coyotes, bobcats, and beaver; some of which are the object of the furbearer management program. Further description and the management strategies of target furbearing species are included in Chapter IV.

TABLE 1: Land Cover Acres within Cypress Creek National Wildlife Refuge Management Units

Management Unit	Urban	Forested	Wetlands	Water	Grass	Ag	Restored	TOTAL
Cypress Creek	2	863	208	12	353	450	1611	3499
Limekiln	0	142	42	10	163	351	992	1700
Cache River	2	148	168	72	37	27	751	1205
Butter Ridge	17	484	192	54	314	751	469	2281
Indian Creek	2	393	210	42	151	126	35	959
Sandy Creek	2	983	289	32	222	277	0	1805
Lake Creek	0	1650	185	72	378	531	264	3080
Old Channel	2	203	74	101	37	596	25	1038
TOTAL	27	4866	1368	395	1655	3109	4147	15,567

IV. DESCRIPTION OF MANAGEMENT PROGRAM

Furbearer Management Program Goals

Furbearer trapping has been a traditional use throughout southern Illinois and is an important element of wildlife management programs within the IDNR as well as the National Wildlife Refuge system. More than half of all wildlife refuges have used trapping for reasons that include habitat management, facility protection or for recreational, commercial or subsistence opportunities (USFWS, 1997). Furbearer trapping on the Refuge is considered an important management tool in meeting refuge goals and objectives. Wetland management, dike/levee maintenance, and migratory bird management are influenced by furbearer management. The trapping program conducted on the Refuge is designed to reduce impacts and damage to Refuge facilities, reduce predator populations, as well as offer a recreation opportunity.

The Service permits trapping of furbearing animals on National Wildlife Refuges where it may contribute to or be compatible with the management objectives of the Refuge. The Refuge will implement a trapping program for resource management reasons with the target species of beaver (*Castor canadensis*), muskrat (*Ondatra zibethicus*), and raccoon (*Procyon lotor*).

Goals include:

- A. Reduce numbers of beavers, muskrats, and raccoons to limit damage to Refuge habitat and adjoining private property.
- B. Safeguard Refuge infrastructure (levees, roads, water control structures) critical to managing habitat for fish and wildlife.
- C. Provide a traditional recreational use of Refuge resources while meeting the purposes of the Refuge and mission of the Refuge System.
- D. Provide quality trapping opportunities that minimize conflict with other public use activities.

Furbearer Trapping Program

In Illinois, 13 species are defined as fur-bearing mammals that may be trapped. All are considered abundant and are closely monitored by IDNR resource staff in order to keep them that way (Bluett, 2002). Trapping is also highly regulated in the state; nearly 2 dozen laws set standards for animal welfare by limiting when, where, and how animals are taken. The opening of trapping seasons, trapping methods, and other regulations on Cypress Creek National Wildlife Refuge generally follow regulations established for the state; however, trapping is further restricted by special conditions that include trap selection and species that are targets for management. Also Refuge management may at any time, before or during the trapping season, halt or limit trapping on the Refuge. Information on Illinois trapping regulations can be found on the following link: <http://www.dnr.illinois.gov/trapping/Pages/default.aspx>

Trapping on the Refuge would be conducted for resource management reasons with the targets of beaver, muskrat, and raccoon. Relatively high populations of beaver and muskrats tend to complicate water management activities and damage wetlands dikes and levees; raccoons have been documented as an efficient nest predator primarily linked to the cause of reproductive failure in birds (Hoover, 2006). All other furbearers are considered non-target animals and may be taken as incidentals during the trapping season; however, if a non-target animal is found alive and in satisfactory condition, it should be released if it can be done in a safe manner. Non-target animals found dead or seriously injured will be included in the Trapping Log (Appendix E) and Fur Catch Report (Appendix F) following the season. Components of the trapping program are described below.

Special Use Permit for Trapping

Special use permits will be issued to all trappers that present an Illinois State trapping license. Permits will be issued on a first-come, first-served basis and may be limited based on management need. Trappers must carry the State trapping license and the Special Use Permit while trapping. Conditions of the Permit may be modified as needed; these changes will be made by an addendum which becomes part of the issued Permit. The permit includes terms and conditions of trapping activity and requires each permit holder to keep a trapping log. The log will provide the Refuge with valuable information on total species taken (target and non-target) and the trapping location and method. This information will assist with building a Refuge-specific database for monitoring and future management.

Target Species

Beaver, muskrat, and raccoon are abundant refuge-wide and throughout the state of Illinois. These species have been chosen for management for impacts linked to the well-being of ground-nesting birds and damages caused to Refuge infrastructure and habitat resources. Another species that has not been documented on the Refuge but could be included in the future is the nutria (*Myocastor coypus*); this rodent is a large, herbivorous, semiaquatic mammal native to South America; its destructive feeding and burrowing behaviors make this invasive species a pest in several states throughout the U.S. but currently not in Illinois. If its range continues north, nutria may be added to the list of species chosen for management. River otter are not included as a chosen species since there is not a documented biological or management need for a larger harvest of otters on the Refuge. As of 2012, IDNR permits the taking of five otters per licensed individual during the trapping season from November 10 to March 31.

Trap Type and Check Frequency

Trap selection is based on best management practices (BMP) developed by the Association of Fish and Wildlife Agencies. The purpose of BMPs is to provide trapping specifications and techniques that ensure the welfare of trapped animals, avoid unintended captures of other non-target animals, and improve safety to the trapper and public. Trap selection is also consistent with IDNR Administrative Rules for trapping on the adjoining Cache River State Natural Area (<http://www.dnr.illinois.gov/adrules/documents/17-570.pdf>). As a result the Refuge permits the following traps to be used on target species:

1. Body-gripping Traps: Muskrats and Beavers
2. Dog-proof Leg-hold Trap: Raccoons

The Refuge also requires that body-gripping traps (i.e. conibear traps #110 or #330) for muskrat and beaver be submerged under the water; this technique prevents the animal from surfacing once it is trapped resulting in a quick death. In addition, the use of these traps and techniques poses minimal threat to other non-target species and addresses concerns for dog and visitor safety. The use of exposed flesh or carcass baits, including fish, is prohibited by state law. Permittees are expected to tend each trap/set on the Refuge at least once every calendar day. This requirement complies with Illinois state law as well. The Refuge has other restrictions regarding tending traps, set traps, use of vegetation, disturbance, etc. that appear in the Special Use Permit (Appendix D).

Handling Incidental Take

If a non-target mammal (animal that is not authorized to be trapped under a special use permit) is found alive and in satisfactory condition, it is encouraged in the special conditions that the animal be released if it can be done in a safe manner. Animals found dead or mortally injured will be immediately disposed of in accordance with state law. Incidental take of any animal also requires the permittee to document the take on the daily log.

Monitoring and Evaluation of Furbearer Populations

Refuge staff will use information from daily logs to compile and summarize harvest data. This information will be included in a Fur Catch Report that is used for management purposes and

shared with respective resources agencies. The Refuge will also support research of furbearer populations in conjunction with IDNR wildlife biologists, universities, and other organizations.

Law Enforcement Reporting and Revocation of Privileges

Refuge law enforcement and management will evaluate and make an appropriate judgment if a permittee fails to comply with any of the Refuge special conditions for trapping. Terms of revocation will be included in the Special Use Permit provided to each permittee; possible actions may include: a) revocation of existing permits b) refusal of future trapping privileges c) refusal of other privileges requiring a Special Use Permit.

Refuge Access

Parking lots and boat ramps provide access throughout the Refuge. Twenty-one parking areas have been designated throughout the Refuge and three boat ramps provide access to the Cache River. All vehicles are restricted to existing county roads or designated Refuge access roads. Utility and all-terrain vehicles are not permitted except by individuals with a disability possessing a Special Use Permit for UTV/ATV Use (Appendix G). Access by boat is permitted on waters adjacent to land owned by the Refuge; however the Cache River and associated tributaries are not designated as “navigable public water bodies.” Individuals are permitted on the river where the Refuge owns one side or both sides of the channel. Otherwise use of the Cache River requires permission from the adjoining landowner. In addition the Refuge follows the state regulation of a 10-horsepower motor restriction for safety reasons due to fluctuating or shallow water levels and the presence of numerous debris dams.

Use of Utility (UTV) and All-terrain (ATV) Vehicles

Utility/All-terrain vehicles may be used on the Refuge by a trapper with a disability; use is restricted to existing roads and trails only and further described in the Appendix G. In order to qualify for this program, each individual is required to show proof of a disability with a Standing Vehicle Permit issued by the IDNR. Nonresidents who want to participate in trapping under this program are required to show equivalent documentation from their state of residence or obtain a Standing Vehicle Permit from IDNR. Once proper documentation is provided, the Refuge will issue a special use permit (SUP) for one year. Specific details, regulations and restrictions are outlined in the “Policy for Hunters/Trappers with Disabilities” (Appendix G).

Orientation and Safety

Orientation to Refuge lands and property within the Refuge is provided through an annual news release to area papers and through Refuge signs, brochures, and maps. The Refuge does not require specific orientation or safety training for individuals participating in general trapping activities; however, the state of Illinois has requirements for trapper education and safety training and offers an annual course schedule.

Entry and Access Procedures

There are no special entry or access procedures for trappers using the Refuge with the exception of the Bellrose Waterfowl Reserve, which is a closed area. The “closed area” restriction reduces the extent of disturbance to waterfowl by human activities during the trapping season, thus enhancing the ability of the Refuge to provide secure resting and feeding areas for migrating

waterfowl. When necessary, Bellrose Reserve may be open to trapping with restrictions that limit the number of permittees and access to the area until the day after the last day of the regular State duck hunting season.

Trapping Log

During the trapping season, the permittee is required to keep a Trapping Log (Appendix E) which will provide a record of all animals (target and non-target) taken and the number of traps used. Data from the log will be compiled and summarized in a Fur Catch Report (Appendix F) following the close of the trapping season and submitted to the Refuge office by April 16.

V. PLAN IMPLEMENTATION

Components necessary to implement the Furbearer Management Plan include monitoring and evaluation, plan review and revision, funding and coordination with IDNR.

Monitoring and Evaluation (Biological Conflicts)

Refuge staff will coordinate with IDNR and other wildlife resource professionals to ensure that the Refuge trapping program will not adversely impact target species populations. These monitoring activities include direct observation of populations, consultation with state and federal resource specialists, and review of current species survey information and research. Land use changes, habitat condition, management objectives, invasive species, floods, disease outbreaks, and climate may alter expected outcomes; monitoring will be critical to detecting and reacting to such change (USFWS, 2007). As a result, Refuge management could limit or exclude trapping activities on portions of the Refuge to avoid conflicts related to biological resources.

Plan Review and Revision

Public uses are developed to complement each other and reduce conflict. Wildlife observation, photography, environmental education, interpretation, hunting and fishing are current activities at the Refuge. No conflicts are expected but if conflicts arise, Refuge management may limit uses to minimize conflict and ensure public safety. As noted above, environmental change and unforeseen effects may call for changes in the plan. At least every five years, Refuge staff and resource partners will review the effectiveness of the Furbearer Management Plan and make revisions as needed. The annual fur catch report (assembled from the trapper daily logs) will also provide year-to-year feedback from trappers on plan effectiveness and any emerging issues.

Funding & Staffing Requirements

The Furbearer Management Program is designed to be administered with minimal Refuge resources. The annual costs of enforcing a trapping program on the Refuge come out of the Refuge's annual budget. Expenses include boundary posting, signage, brochures, parking lot/facility maintenance, gate installation, and permit activities.

Law Enforcement and Coordination with Partners

Law enforcement of Refuge and State trapping regulations, trespass and other public use violations associated with management of the Refuge is the responsibility of a commissioned Refuge Law Enforcement Officer. In absence of a full-time Refuge Officer, law enforcement

assistance is provided by Crab Orchard National Wildlife Refuge officers and IDNR conservation officers. On-going coordination and communication is conducted throughout the year.

VI. REFERENCES

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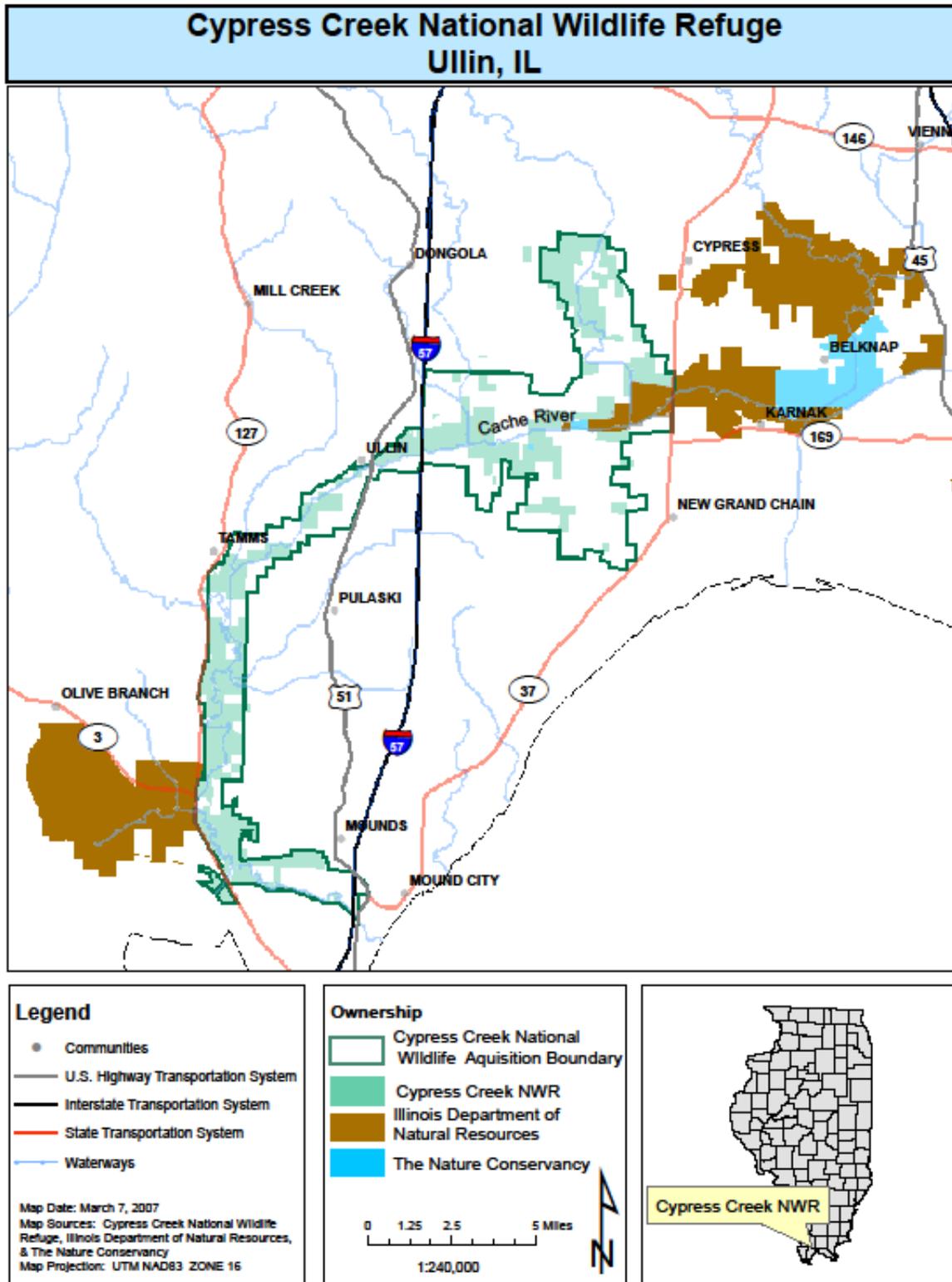
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US Fish and Wildlife Service Manual. <http://www.fws.gov/policy/manuals/>

APPENDIX A: Ownership Boundaries



APPENDIX B: Description of Refuge Management Units

Acreages include land within the Refuge purchase boundary some of which is currently within private ownership.

Cypress Creek Unit: This unit forms the northernmost boundary of the Refuge and includes some of the higher elevations (500 feet msl) on-site. The area is drained by Cypress Creek which flows into the Cache River south of the Perks Road. The unit contains approximately 6,000 acres of land with over 3500 acres in agriculture (includes private land); in addition to 1,100 acres of low, poorly drained bottomland. To date the Refuge owns 3,400 acres of which 1,611 acres have been restored to forest and wetlands.

Limekiln Slough Unit: This unit includes approximately 6,600 acres with only 22% in Refuge ownership (1,500 acres). The area includes 4,500 acres of agriculture and is bounded on the east, south, and west by low hills. The area is drained by Limekiln Slough which empties into the Cache River. The central portion of the unit historically was a large floodplain forest dominated by oaks and hickories until it was cleared in the 1970's. To date the Refuge owns 1,500 acres of which 850 acres have been restored to forest and wetlands.

Cache River Unit: This unit includes 5,276 acres. The primary feature within this unit is Buttonland Swamp – a National Natural Landmark owned by the Illinois Department of Natural Resources; however the Refuge acquisition boundary forms a buffer around this section of river which widens with a gradual fall of .2-.3 feet per mile. Currently, CCNWR owns 1,136 acres of which 750 acres have been restored to restore the riparian corridor to forest and wetlands. Historically, this section of the river featured wide expanse of open water with depths of more than 10 feet. Within the last century land clearing and channelization to increase drainage has resulted in excessive silt and sediment deposition eliminating this deep water. In 2002, approximately one mile of river within this unit was dredged to remove sediment and initiate deep water habitat restoration. Today, this section of river contains old growth stands of bald cypress and tupelo and areas dominated by buttonbush.

Butter Ridge Unit: This area contains 5,936 acres of which 60% are in agricultural production. Currently the Refuge owns 2,281 which include the 1,000 acre Frank Bellrose Waterfowl Reserve; there are 270 acres of moist soil wetlands within the Reserve. This area is intensively managed for waterfowl and shorebirds and provides a sanctuary to migrating ducks. Both Big Creek and Little Creek enter the Cache through the Butter Ridge Unit. Big Creek has a relatively steep hydrologic gradient and drains a basin covering 52 square miles; the channelized lower reach of this tributary bisects the Bellrose Reserve and enters the Cache River. During flood events Big Creek's stream volume and velocity threatens Bellrose moist soil units by backing silt-laden water into the moist soil units and or breaching the levees; Big Creek stream flow can also exceed the Cache River's ability to maintain a west and south flow thus reversing the flow of the Cache River and increasing sedimentation into Buttonland Swamp (within the Middle Cache Valley).

Indian Camp Creek: This unit which is low, flat and primarily river floodplain includes approximately 3,000 acres with 1,208 acres in agriculture (primarily private land). Extensive channelization between the towns of Ullin and Tamm's cut-off many of the historic oxbows and river meanders from the main river channel. To date CCNWR owns approximately 1,000 acres which includes floodplain forest and wetlands.

Sandy Creek and Lake Creek Units: These units include 7,432 acres and form a relatively narrow corridor along the Cache River from the town of Tamms to the Mississippi Diversion. Cypress Creek National Wildlife Refuge owns approximately 5,700 acres with 300 acres in agriculture. The remaining acreage has been restored to floodplain forest and wetlands. Extensive channelization between the towns of Sandusky and Ullin has cut-off many of the historic oxbows and river meanders from the main river channel.

Old Cache Channel Unit: This unit includes 2,537 acres with approximately 1,038 acres in Refuge ownership. Approximately 90% of the unit is low, poorly drained bottomland (~320 feet msl) and is characterized by hydric soils. The Old Cache River Channel forms the south boundary of this unit. In 1950 a ditch was cut on the west end of the channel diverting water from Cache River directly into the Mississippi thus abandoning approximately 6 miles of river channel that empties into the Ohio River. Prior to Refuge ownership, the United States Army Corps of Engineers (USACE) has maintained a floodgate into the Ohio River (on the east end of the old channel). The USACE with the cooperation of the Cairo Drainage District, are currently responsible for manipulating water levels in the channel to maintain drainage and flood control. When the gates are open and the Ohio River is down, water levels can drop to 2' or less; however, existing drainage district staff assist with maintaining a minimal water level in the channel.

APPENDIX C: Illinois 2015-2016 Trapping Season Dates and Limits

SPECIES	DATES AND ZONES	LIMIT	SPECIAL REGULATIONS
Raccoon, Opossum, Skunk, Weasel, Mink, Muskrat, Fox(Red and Gray), Coyote, Badger	Nov. 5, 2015-Jan. 20, 2016 (North) Nov. 10, 2015-Jan 25, 2016 (South)	None except for badger, which is limited to 2 per season in the north zone and 1 per person in the south zone	None
Woodchuck (Groundhog)	June 1-Sept 30 2015 (Statewide)	None	None
Beaver	Nov. 5, 2015-March 31, 2016 (North) Nov. 10, 2015-March 31, 2016 (South)	None	None
River Otter	Nov. 5, 2015-March 31, 2016 (North) Nov. 10, 2015-March 31, 2016 (South)	5 per person, per season (statewide)	Must purchase Otter Registration Permit within 48 hours after each otter is trapped. Must affix official CITES tag to each pelt
Extended Spring Season for Mink and Muskrat	Sunset on Jan. 20 2016-Sunset Feb. 15, 2016 (North) Sunset Jan. 20, 2016- Sunset Feb. 15, 2016 (South)	None	No foothold traps may be set for mink or muskrat. Body-gripping (killer) traps must be completely submerged underwater

APPENDIX D: Special Conditions

Cypress Creek National Wildlife Refuge Special Conditions

These Special Conditions may be revised as necessary by the Refuge Manager when conditions change or new information is obtained.

1. The trapping season on the Refuge will be concurrent with the State of Illinois trapping season. Violation of any regulation (State of Illinois, federal, or Refuge) is punishable and will result in the revocation of the trapping permit for one to five years. Repeated violations may result in lifetime revocation of Refuge trapping privileges.
2. Target species include muskrat, beaver, and raccoon only. All other furbearers considered non-target animals, may be taken as incidentals during the trapping season. If a non-targeted animal is found alive and in satisfactory condition the animal should be released if it can be done in a safe manner. Non-target animals found dead or seriously injured will be disposed of in accordance with state law and included in the Trapping Log and Fur Catch Report (Appendix E) following the season.
3. The permittee shall remove from the Refuge all target species and incidentals trapped before skinning. Carcasses should not be left or deposited on the Refuge.
4. Permittees shall document all animals taken on the Trapping Log and summarize total target and incidentals animals on the Fur Catch Report. It is mandatory that this information be submitted to the Refuge office after the trapping season ends and no later than April 16.
5. Only the permittee named in the permit application is authorized to trap on the refuge.
6. Vehicle travel is allowed only on existing roads. Special Use Permits (SUP) allowing All-terrain vehicle (ATV/UTV) use for people with a disability will be granted to those individuals who are able to show proof of a disability with a Illinois Department of Natural Resources (IDNR) "Standing Vehicle Permit" (available from the Cypress Creek refuge office or the IDNR website at <http://dnr.state.il.us>). Individuals with a SUP for ATV/UTV use may only operate vehicles on existing roads and trails.
7. All traps and trapping equipment including flagging and stakes shall be removed by the last day of the trapping season.
8. The trapping permit shall not restrict Refuge staff from carrying out any Refuge management tasks including but not limited to water level manipulation and any repair, construction, or agricultural activity.
9. All boats needed for trapping activity have a 10-horsepower restriction and boats may not be docked overnight on the Refuge.

10. Any person exercising the privilege of trapping furbearing animals on the Refuge shall possess a valid trapping license issued by the state where trapping is performed and a valid Special Use Permit for trapping issued by the refuge. Permittee shall carry both the state trapping license and refuge Special Use Permit on their person at all times while trapping, and upon request, shall exhibit them to any federal, state, or local law enforcement officer.
11. Furbearers may be taken on the refuge using body gripping and dog-proof leg hold traps. Permittee shall tend each trap/set on the refuge at least once every calendar day. Permittee shall not cut any vegetation on the refuge, except willow for use as trap stakes or drags.
12. The bag limit for each furbearer shall be that limit prescribed by applicable state law or refuge regulation, whichever is more restrictive. All animals taken on the refuge shall be included as a part of any state bag limit.
13. All traps and equipment used as instruments of any violation, and all animals or furs illegally taken, shall be subject to immediate seizure, and subsequent forfeiture.
14. It is mandatory that the Fur Catch Report be submitted by April 16, following the trapping season. Failure to accurately complete and return the report by the deadline is sufficient cause for refusal of future permits.

APPENDIX F: Fur Catch Report

Fur Catch Report

Cypress Creek National Wildlife Refuge

Fill in this report completely by summarizing data from the Trapping Log and **mail by April 16** to: Cypress Creek National Wildlife Refuge, 137 Rustic Campus Drive, Ullin, IL 62992. This report is **MANDATORY** even if you did not trap this season.

Name: _____ Permit No. _____

This information is used only by Refuge staff to estimate furbearer populations and manage the trapping program . It is important that you **ACCURATELY** and **COMPLETELY** report how many days you trapped and what you caught. Failure to accurately complete and return this information by April 15 could prevent you from obtaining a Refuge trapping permit the next trapping season.

Average # of Days Trapped: _____

Average # of Traps Set: _____

Target Animal	Refuge Location	Total # Trapped	Total # Released
Muskrat			
Raccoon			
Beaver			
Non-Target Animals	Refuge Location	Number Trapped	Total # Released

Comments: _____

APPENDIX G: Policy for Hunters/Trappers with Disabilities

Policy for Hunters/Trappers with Disabilities (Special Use Permits)

Cypress Creek National Wildlife Refuge

Special Use Permits allowing All-terrain vehicle (ATV/UTV) use for people with a disability will be granted to those individuals who are able to show proof of a disability with a Illinois Department of Natural Resources (IDNR) “Standing Vehicle Permit” (available from the Cypress Creek refuge office or the IDNR website at <http://dnr.state.il.us>). Non-resident hunters who want to participate in hunting or trapping under this program will be required to show equivalent documentation from their state of residence or obtain an IDNR Standing Vehicle Permit.

In order to qualify for a disability ATV/UTV access permit, individuals must meet one of the following criteria to obtain a Standing Vehicle Permit from IDNR with appropriate disability certification by a licensed physician:

1. Have a permanent or irreversible physical disability, are unable to ambulate and require: a wheelchair, walker, one leg brace or external prosthesis above the knee, two leg braces or external prosthesis below the knee, two crutches or two canes for mobility.
2. Suffers significantly from lung disease, to the extent that forces expiratory volume for one second when measured by spirometry is less than one liter or arterial oxygen tension is less than 60 millimeters of mercury on room air test.
3. Suffers significantly from cardiovascular disease, to the extent that functional limitations are classified in severity as class 3 or 4, according to standards accepted by the American Heart Association on May 3, 1988, and where physical activity causes discomfort, fatigue, palpitation, dyspnea or angina pain.
4. Have a temporary disability and have restricted ambulation due to: a) a leg, hip or back, or any part thereof casted by a licensed physician b) post-surgical effects of leg, hip or back surgery c) illness or injury.

Stipulations Necessary to Ensure Compatibility:

All-terrain vehicles (ATV/UTV's) will be limited to existing roads and trails. Use of an ATV/UTV is limited to individuals with a disability with a Refuge Special Use Permit. Accompanying non-disabled companions may not ride on the ATV/UTV. ATV/UTV's must have a spark arrester, and the permittee must ride according to the ATV/UTV manufacturer's instructions. It is suggested that a helmet be worn as protective gear. These stipulations may be revised as necessary by the Refuge Manager when conditions change or new information is obtained.