

Wildlife Conservation Land Program



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Introduction

This document serves as an explanation of the qualifications and landowner requirements for participation in the Wildlife Conservation Land Program (WCLP) as established by G.S. 105-277.15 (Appendix I). Participants meeting all requirements of WCLP may apply for reduced county property tax assessment in the tax assessor's office in the county for which the land is located.

Qualifying land must be managed under a Wildlife Habitat Conservation Agreement with the NC Wildlife Resources Commission that meets one or more of the following land use criteria:

1. Land used for the protection of a wildlife species listed in NCAC 10I.0100,
2. Land used to conserve priority wildlife habitats identified in G.S. 105-277.15,
3. Land dedicated as a Wildlife Reserve and managed as required in NCAC 10L.0101.

Requirements for Participation in the Program

There are a number of requirements relating to both land ownership and land use listed in G.S. 105-277.15, and landowners interested in the program should reference this statute for specific language. The most important requirements are outlined below.

A. Acreage

Wildlife conservation land must consist of at least 20 contiguous qualifying acres managed under a written wildlife habitat conservation agreement. No more than 100 acres of an owner's land in a county may be classified as wildlife conservation land under any combination of land use criteria 1. or 2. above. No more than 800 acres of an owner's land in a county may be classified as wildlife conservation land under criteria 3 above.

B. Land Use

The land must meet one or more of the three land use criteria to qualify as wildlife conservation land.

Criterion 1

Criterion one is met if one or more protected wildlife species lives on the land and the landowner manages the land to protect the species. Protected wildlife species are those designated by NCWRC as endangered, threatened, or special concern ([Protected Species](#)).

The term or phrase "lives on the land" means that a wildlife species has been identified on the land at the time the benefit is claimed and the term "protect" means that the species is protected through appropriate land management strategies. Observation of a species does not automatically qualify a property as wildlife conservation land.

Demonstrable evidence must be presented that the species lives on the land, and habitat management strategies must be implemented that provide for the protection of the species. For migratory species, the land must provide breeding, wintering, or foraging habitat.

Criterion 2

The second criterion is met if the landowner conserves one or more priority wildlife habitats listed below and described in Appendix II.

- longleaf pine forest
- early-successional habitat
- small wetland community
- stream and riparian zone
- rock outcrop
- bat cave

The term “conserve” means to manage for the continued wildlife benefits of one of the above priority habitat types as specified in a written Wildlife Habitat Conservation Agreement. Determination of the priority habitat may incorporate an area of influence surrounding the habitat if that land is essential to and managed for the conservation of the priority habitat. Conservation does not preclude some human uses of the land.

Criterion 3

The third criterion is met if the landowner manages their land as a Wildlife Reserve. Wildlife Reserve Land is land that is actively and regularly used as a reserve for hunting, fishing, shooting, wildlife observation, or wildlife activities; upon which wildlife management activities are conducted to ensure the propagation of a sustaining breeding, migrating, or wintering population of indigenous wild animals. Land primarily used or maintained for other human uses such as large lawns, horse pastures, golf courses, or land primarily and intensively managed for financial gain in non-wildlife oriented activities (e.g., agricultural commodities, forest products, solar panel arrays) will generally not qualify as wildlife reserve land. Land managed as a Wildlife Reserve must consist of one or more of the natural community types listed in 15A NCAC 10L .0101 and the landowner must maintain three or more of the following seven management activities as agreed upon in the written Wildlife Habitat Conservation Agreement.

1. Provide/Maintain Supplemental Food - “supplemental food” is annual or perennial noninvasive plantings that provide a direct or indirect source of food or nutrition for wildlife resources.
2. Provide/Maintain Supplemental Water - “supplemental water” is manmade water features or sources that are created or installed for the benefit of wildlife resources.
3. Provide/Maintain Supplemental Shelter - “supplemental shelter” is natural or artificial structures that are created or installed to provide shelter from the weather, nesting sites, or escape cover from predators. Supplemental shelter may include the addition of natural or artificial structures into aquatic habitats.

4. Conduct/Maintain Habitat Control - “habitat control” is the implementation of practices to establish, restore, enhance, or maintain upland, wetland, riparian, or aquatic vegetation or physical aquatic habitat.
5. Provide/Maintain Erosion Control - “erosion control” is the implementation of practices to prevent, reduce, or minimize soil erosion. Practices may include streambank and in-stream channel stabilization. Practices established for erosion control shall not be known to harm wildlife or include invasive plant species.
6. Conduct/Maintain Predator Control - “predator control” is a practice implemented to reduce the abundance of a species or suite of species that preys on any life stage of wildlife species for which the land is managed. Predator control includes removal of invasive animal species to manage or protect wildlife or wildlife habitats.
7. Conduct Census of Animal Population(s) - “census of animal population on the land” is conducting or participating in periodic surveys and inventories to determine the presence, number, composition, biological condition, or human use of wildlife.

C. Ownership

The landowner may be an individual, a family business entity, or a family trust (publicly traded corporations are not eligible). The land must have been owned by the same owner for the previous five years, with the following exceptions:

1. if the land is owned by a family business, at least one of the current members of the business must have owned the land for the past five years;
2. if the land is owned by a family trust, at least one of the current beneficiaries must have owned the land for the past five years; or
3. if a new owner acquires land already classified as wildlife conservation land, the classification is retained if the new owner files an application with the county and signs the existing wildlife habitat conservation agreement with NCWRC within 60 days of acquiring the property.

D. Prior Land Classification (applicable to Criteria 1 and 2 only)

For land not currently enrolled in the North Carolina Present-Use Value Program, landowners must demonstrate to the county assessor and the NCWRC that the land has been used for the purpose outlined in the wildlife habitat conservation agreement for three years preceding January 1 of the year for which the benefit is claimed. Landowners may enroll land currently receiving a reduced tax rate as agricultural, horticultural or forest land as wildlife conservation land provided the landowner meets all other requirements related to wildlife conservation land.

E. Penalty for Not Fulfilling Landowner Obligations

The difference between the taxes that are due on wildlife conservation land and what would be due if the land were taxed on the basis of the true value of the property is a lien

on the property. If the land loses its eligibility for the deferral as a result of a disqualifying event, the deferred taxes for the three preceding years are due and payable to the county. Deferred taxes are not due in special circumstances as provided in G.S. 105-277.15(1)(f).

F. Application

The landowner must submit an application and a copy of the approved Wildlife Habitat Conservation Agreement to the county assessor's office during the regular listing period, or within 60 days of purchasing a property currently enrolled in WCLP. The typical listing period is the month of January for the year in which the landowner desires the assessment.

G. Inspection (applicable to Criteria 3 only)

Land enrolled under Criteria 3 must be inspected by a certified wildlife biologist at least once every five years to ensure that at least three of the seven management activities are maintained. The landowner must keep a log of actions conducted to install and/or maintain management activities as evidence that selected practices were maintained over the five-year period.

NCWRC Wildlife Habitat Conservation Agreement

The statute specifies that wildlife conservation land must be managed under a written Wildlife Habitat Conservation Agreement with NCWRC. The agreement must be entered into as of January 1 of the year for which the benefit is claimed. The management agreement must contain the following for each criterion:

Criterion 1 - Document the presence of a NCWRC protected species ([Protected Species](#)) and describe the management strategies in place or planned with appropriate timelines to ensure the continued existence of the protected species.

Criterion 2. - Document the existence of priority habitats and describe the management strategies in place or planned with appropriate timelines to ensure they are conserved.

Criterion 3. - Identify land dedicated as a Wildlife Reserve, which three (or more) of the seven management activities will be maintained on the land, and how they will be maintained.

A Wildlife Habitat Conservation Habitat Agreement form is available from the NCWRC at [WHCA](#). NCWRC staff biologists are available to assist landowners with completion of the agreement and NCWRC approval is required prior to submission to the County tax assessor's office. Upon approval of the wildlife habitat conservation agreement, the landowner must make application to the county to request their property be assessed as wildlife conservation land. The County Assessor will determine if the land qualifies for assessment at a reduced value.

Appendix I: G.S. 105-277.15

§ 105-277.15. Taxation of wildlife conservation land.

(a) Definitions. - The following definitions apply in this section:

- (1) Business entity. - Defined in G.S. 105-277.2.
- (2) Family business entity. - A business entity whose members are, directly or indirectly, individuals and are relatives. An individual is indirectly a member of a business entity if the individual is a member of a business entity or a beneficiary of a trust that is part of the ownership structure of the business entity.
- (3) Family trust. - A trust that was created by an individual and whose beneficiaries are, directly or indirectly, individuals who are the creator of the trust or a relative of the creator. An individual is indirectly a beneficiary of a trust if the individual is a beneficiary of another trust or a member of a business entity that has a beneficial interest in the trust.
- (4) Member. - Defined in G.S. 105-277.2.
- (5) Relative. - Defined in G.S. 105-277.2.

(b) Classification. - Wildlife conservation land is designated a special class of property under Article V, Section 2(2) of the North Carolina Constitution and must be appraised, assessed, and taxed in accordance with this section. Wildlife conservation land classified under this section must be appraised and assessed as if it were classified under G.S. 105-277.3 as agricultural land.

(c) Requirements. - Land qualifies as wildlife conservation land if it meets the following size, ownership, and use requirements:

- (1) Size. - The land must consist of at least 20 contiguous acres.
- (2) Ownership. - The land must be owned by an individual, a family business entity, or a family trust and must have been owned by the same owner for the previous five years, except as follows:
 - a. If the land is owned by a family business entity, the land meets the ownership requirement if the land was owned by one or more members of the family business entity for the required time.
 - b. If the land is owned by a family trust, the land meets the ownership requirement if the land was owned by one or more beneficiaries of the family trust for the required time.
 - c. If an owner acquires land that was classified as wildlife conservation land under this section when it was acquired and the owner continues to use the land as wildlife conservation land, then the land meets the ownership requirement if the new owner files an application and signs the wildlife habitat conservation agreement in effect for the property within 60 days after acquiring the property.
- (3) **(Effective for taxes imposed for taxable years beginning before July 1, 2019)** Use. - The land must meet all of the following requirements:
 - a. The land must be managed under a written wildlife habitat conservation agreement with the North Carolina Wildlife Resources Commission that is in effect as of January 1 of the year for which the benefit of this section

is claimed and that requires the owner to do one or more of the following:

1. Protect an animal species that lives on the land and, as of January 1 of the year for which the benefit of this section is claimed, is on a North Carolina protected animal list published by the Commission under G.S. 113-333.
 2. Conserve any of the following priority animal wildlife habitats: longleaf pine forest, early successional habitat, small wetland community, stream and riparian zone, rock outcrop, or bat cave.
- b. It must have been classified under G.S. 105-277.3 when the wildlife habitat conservation agreement was signed or the owner must demonstrate to both the Wildlife Resources Commission and the assessor that the owner used the land for a purpose specified in the signed wildlife habitat conservation agreement for three years preceding the January 1 of the year for which the benefit of this section is claimed.
- (3) **(Effective for taxes imposed for taxable years beginning on or after July 1, 2019)** Use. - The land must meet all of the following requirements:
- a. The land must be managed under a written wildlife habitat conservation agreement with the North Carolina Wildlife Resources Commission that is in effect as of January 1 of the year for which the benefit of this section is claimed and that requires the owner to do one or more of the following:
 1. Protect an animal species that lives on the land and, as of January 1 of the year for which the benefit of this section is claimed, is on a North Carolina protected animal list published by the Commission under G.S. 113-333.
 2. Conserve any of the following priority animal wildlife habitats: longleaf pine forest, early successional habitat, small wetland community, stream and riparian zone, rock outcrop, or bat cave.
 3. Create and actively and regularly use as a reserve for hunting, fishing, shooting, wildlife observation, or wildlife activities, provided that the land is inspected by a certified wildlife biologist at least quintennially to ensure that at least three of the seven activities listed in this sub-sub-subdivision are maintained to propagate a sustaining breeding, migrating, or wintering population of indigenous wild animals for human use, including food, medicine, or recreation. The Commission shall adopt rules needed to administer the inspection requirements of and activities mandated by this sub-sub-subdivision. [The activities are as follows:]
 - I. Supplemental food.
 - II. Supplemental water.
 - III. Supplemental shelter.
 - IV. Habitat control.
 - V. Erosion control.
 - VI. Predator control.

VII. Census of animal population on the land.

- b. For land used pursuant to sub-sub-subdivisions 1. or 2. of sub-subdivision a. of this subdivision, it must have been classified under G.S. 105-277.3 when the wildlife habitat conservation agreement was signed or the owner must demonstrate to both the Wildlife Resources Commission and the assessor that the owner used the land for a purpose specified in the signed wildlife habitat conservation agreement for three years preceding the January 1 of the year for which the benefit of this section is claimed.

(d) **(Effective for taxes imposed for taxable years beginning before July 1, 2019)** Restrictions. - The following restrictions apply to the classification allowed under this section:

- (1) No more than 100 acres of an owner's land in a county may be classified under this section.
- (2) Land owned by a business entity is not eligible for classification under this section if the business entity is a corporation whose shares are publicly traded or one of its members is a corporation whose shares are publicly traded.

(d) **(Effective for taxes imposed for taxable years beginning on or after July 1, 2019)** Restrictions. - The following restrictions apply to the classification allowed under this section:

- (1) For land used pursuant to sub-sub-subdivision 3. of sub-subdivision a. of subdivision (3) of subsection (c) of this section, no more than 800 acres of an owner's land in a county may be classified under this section. For all other land classified under this section, no more than 100 acres of an owner's land in a county may be classified under this section.
- (2) Land owned by a business entity is not eligible for classification under this section if the business entity is a corporation whose shares are publicly traded or one of its members is a corporation whose shares are publicly traded.

(e) **Deferred Taxes.** - The difference between the taxes that are due on wildlife conservation land classified under this section and that would be due if the land were taxed on the basis of its true value is a lien on the property. The difference in taxes must be carried forward in the records of each taxing unit as deferred taxes. The deferred taxes for the preceding three fiscal years are due and payable in accordance with G.S. 105-277.1F when the land loses its eligibility for deferral as a result of a disqualifying event. A disqualifying event occurs when the property no longer qualifies as wildlife conservation land.

(f) **Exceptions to Payment.** - No deferred taxes are due in the following circumstances and the deferred taxes remain a lien on the land:

- (1) When the owner of wildlife conservation land that was previously classified under G.S. 105-277.3 before the wildlife habitat conservation agreement was signed does not transfer the land and the land again becomes eligible for classification under G.S. 105-277.3. In this circumstance, the deferred taxes are payable in accordance with G.S. 105-277.3.
- (2) When land that is classified under this section is transferred to an owner who signed the wildlife habitat conservation agreement in effect for the land at the time of the transfer and the land remains classified under this section. In this circumstance, the deferred taxes are payable in accordance with this section.

(g) Exceptions to Payment and Lien. - Notwithstanding subsection (e) of this section, if land loses its eligibility for deferral solely due to one of the following reasons, no deferred taxes are due and the lien for the deferred taxes is extinguished:

- (1) The property is conveyed by gift to a nonprofit organization and qualifies for exclusion from the tax base under G.S. 105-275(12) or G.S. 105-275(29).
- (2) The property is conveyed by gift to the State, a political subdivision of the State, or the United States.

(h) Administration. - An owner who applies for the classification allowed under this section must attach a copy of the owner's written wildlife habitat agreement required under subsection (c) of this section. An owner who fails to notify the county assessor when land classified under this section loses its eligibility for classification is subject to a penalty in the amount set in G.S. 105-277.5. (2008-171, s. 1; 2018-95, s. 1.)

Appendix II: Description of Priority Habitats

These habitat types are listed as habitats of concern in the 2005 North Carolina Wildlife Action Plan (NCWAP) and more detailed information concerning each habitat type may be found at [NC Wildlife Action Plan](#) .

Early Successional Habitat

Early successional habitat is represented best by land where most trees have been removed either through natural means or by human activity. This habitat type requires frequent disturbance that suppresses tree growth to prevent the land from returning to forest. The land must be managed with periodic disturbances such as timber harvest, disking, mowing, burning, and/or herbicide treatments to maintain this condition. Common types of early-successional habitat include recently abandoned farm fields, clear cuts, field borders, savannas, prairies, meadows and mountain balds.

Early successional habitat can be a mix of grasses, forbs, legumes, wildflowers, vines, shrubs and saplings. Scattered mature trees may be present but not to the point that they shade out the beneficial understory vegetation. Tree density within this habitat type must be at a level such that the forest canopy remains open and the ground cover of grasses, forbs and other wildlife beneficial vegetation is not diminished. Early successional habitat in a degraded condition can be revived with disturbance.

Early successional wildlife habitat differs from other open land by the vegetative component represented. While pastures, hayland, and agriculture crops may be considered early successional lands, they should only be considered early successional habitat if they are composed of vegetation that is considered beneficial to wildlife and the land is managed for that purpose. An example of this situation includes native warm season grass fields where forbs have been mixed with the grass and the landowner uses a wildlife compatible management strategy.

The NCWAP identifies 31 priority wildlife species associated with early successional habitat. Bobwhite quail, cottontail rabbits, whip-poor-wills, eastern meadowlark, eastern box turtles, and painted buntings are some of the most well-known early successional dependent species. These species have declined drastically in North Carolina and elsewhere in the U.S. over the past 50 years, and their conservation is a state and national priority.

Stream and Riparian Zones

Stream and riparian zone habitat is defined as the land area adjacent to and including a perennial or intermittent water body. The riparian zone generally extends from the water's edge at base flow to the place where the stream does not interact with or influence the type and density of vegetation present, generally where the upland ecological community begins. It encompasses the stream banks and floodplain along with the plant communities as well as the plant material (grass, leaves, twigs, branches, trees, etc.) likely to enter the stream. Stable riparian zones contain stream banks that are not eroding and have diverse plant communities that are generally undisturbed. Scientific literature indicates that while grass has some minimum riparian buffer

benefits a mature forest is needed to serve all the riparian buffer functions. A diverse plant community is recommended to provide maximum wildlife value within the area.

For purposes of this document the riparian area is measured horizontally from the top of the stream bank. A minimum riparian buffer width of 30 feet is suggested for the Wildlife Conservation Land Program as a means to accommodate a variety of landowners and for minimal water quality benefits. The maximum width is 300 feet or the width of the floodplain, whichever is greater. The riparian zone shall not extend beyond the watershed boundary as delineated by the ridges surrounding the watershed. The stream area included in this habitat type shall be the area as measured between the top of the banks along the channel.

It is imperative to note that there are situations when an even wider riparian buffer may be needed to protect aquatic biota and their habitats. Dependent on site specific situations, some landowners may be required by NCWRC staff to include areas wider than 30 feet. Some examples of these situations include: 1) adjacent land uses that are likely to impact surface waters, 2) the surrounding slopes are steep, or 3) known locations of priority aquatic or terrestrial species. Additionally, livestock must be fenced out of all streams for which WCLP classification is being claimed.

Inevitably situations will arise where a landowner does not own land extending 30 feet on either side of the stream channel. In situations where landowners cannot protect the total minimum footage, they must protect the riparian zone to the extent possible. For example, a landowner would be unable to include the minimum footage when: 1) their property boundary is the centerline of the stream channel, 2) the property boundary is within 30 feet of the top of the stream bank, or 3) there is a permanent structure within 30 feet of the stream bank. However, a minimum width of 15 feet must be available regardless of the land use. The lack of riparian habitat protection in these situations should be compensated by ensuring that the average stream and riparian zone width is 30 ft for projects only on one side of the channel or 60 feet when the project includes both sides of the stream channel.

Bat Cave

Caves are mainly found scattered across the Southern Blue Ridge physiographic province, although some do occur in other regions of the state. While there are several different types of caves, the most common types found in North Carolina are solution caves, fissure caves, and rock shelter/boulder caves. These types of caves differ primarily in the way they are formed. Solution caves are created by the action of water, dissolving the underlying rock to form tunnels. Fissure caves are formed by movement of the earth's surface that results in cracks of the rock layers. Rock shelter/boulder caves are formed by erosive forces, weather events, earth surface movements, and other factors, which essentially leave spaces underneath/behind surface rock. The vast majority of caves in North Carolina are rock shelter/boulder caves. In addition to natural caves, extensive mining in North Carolina has resulted in numerous manmade subterranean excavations that also function as bat caves. The definition of cave habitat is intended to include only mines that include subterranean excavations with conditions inside the mine shafts and tunnels that resemble natural caves.

Caves may be used by 13 species of bats in North Carolina for hibernation, birthing and the raising of pups, and roosting; while other caves may not be used by bats at all. In order to be considered bat cave habitat, the cave must have documented use by aggregations of bats.

The volume of air, temperature, and relative humidity are important factors limiting use of caves by bats. Surface conditions surrounding cave entrances can have significant effects upon those conditions. In addition, land use in the immediate vicinity of cave entrances can affect air flow through the cave and foraging conditions for resident bats and can render the cave unsuitable for bats due to disturbance by humans. For all these reasons, bat cave habitat includes an area encompassed by the cave and all its entrances as well as the surface area necessary to maintain the temperature, air flow, humidity, foraging, and disturbance regime such that conditions for bat use are retained.

Rock Outcrop

Rock outcrop habitat is comprised of numerous distinct ecological community types described in the North Carolina Wildlife Action Plan. These community types include boulderfields, rocky summits, granitic domes, acidic cliffs, mafic cliffs, granitic flatrocks, and talus slopes. In general rock outcrops are often characterized as open canopy communities with patchy vegetation due to variability in soil depth and moisture content; however, specific rock outcrop habitats can occur within a forested setting (e.g., boulderfields within northern hardwood forests or small rock outcrops within any forest habitat). Lichens and mosses occur on bare rock and other vegetation may develop in deep moss mats or crevices (oatgrass species, sedges, mountain dandelion). Woody plants or trees such as mountain laurel, Catawba rhododendron, table mountain pine, red spruce, various oaks, and yellow birch may occur in the deepest soil mats, rock crevices, and at the edge of these habitats. Water seepage through rock crevices may provide moisture for amphibians, mosses, lichens, and wetland vegetation. Regardless of ecological classification, rock dominates the surface of the land.

Many wildlife species utilize rock outcrop habitat without regard to elevation (e.g., peregrine falcon), whereas others will utilize only high elevation rock outcrop habitats (e.g., rock voles and rock shrews). However, many wildlife species and even more plant species are associated with both high and low elevation rock communities. The elevation limits for each species are quite variable.

The conditions present at individual rock outcrops are unique, owing to geology, geography, elevation, moisture, and landscape position. They may contain discreet communities, or they may be dispersed among a variety of other community types that are connected through local geology and landscape conditions. As such, the extent of habitat that each rock outcrop provides is dependent upon the entire set of conditions in and surrounding the surface rock. Those conditions influence its use by plants and animals dependent upon the surface rock and may include significant amounts of adjacent ecological community types.

Small Wetland Communities

Small wetland communities can include vernal pools, seeps, small depression ponds, ephemeral wetlands, beaver ponds, small depression pocosins, interdune ponds, clay-based Carolina bays, limesink depressions, bogs and associated wetlands. Many of these communities are found only in a specific geographical region of the state. All are associated with hydric soils, hydrophilic vegetation, and in general with the presence of water on the surface for at least some portion of the year. By definition these wetlands are small in size but may be extremely important in wildlife value and benefit. The evaluation of each small wetland community should consider not only the land area representing the wetland, but also the surrounding area of influence associated with the wetland. A buffer around the wetland habitat is needed to ensure continued viability of the wetland when determining eligibility for the program. Disturbance and negative land use activities adjacent to the wetland reduces the value of the area to wildlife and can negatively impact the wetland system.

Longleaf Pine Forest

Seven distinct longleaf pine plant communities have been identified in North Carolina: xeric sandhill scrub, pine/scrub oak sandhill, mesic pine flatwoods, wet pine flatwoods, coastal fringe sandhill, pine savanna, and piedmont longleaf forest. Soil moisture ranges from poorly-drained to excessively well-drained. Plant species vary by community type, but all naturally functioning longleaf stands contain native herbaceous ground cover and native grass. Wiregrass is the dominant native grass in the coastal plain south of Highway 264, and certain bluestem species dominate north of Highway 264. Both grasses can be found on scattered sites in the piedmont. Most of the current remnant longleaf forests in North Carolina occur in the coastal plain, but there are significant longleaf restoration efforts underway in the piedmont.

The NCWAP identifies 36 priority wildlife species associated with excessively well-drained longleaf forests. While not identified specifically in the plan, the species associated with wet pine savannah are generally the same. The better-known species are fox squirrel, red-cockaded woodpecker, eastern coach whip, bobwhite quail, and brown-headed nuthatch.

Ground cover is the most important aspect of a longleaf ecosystem while the percentage of longleaf pines in the overstory is less important. Native grasses, forbs, and legumes are components of a naturally functioning longleaf forest. Raking pine straw in a longleaf stand degrades the groundcover and thus reduces the wildlife value of the stand. Raked stands should not be considered functioning longleaf forests for the purposes of wildlife PUV.

The percentage of longleaf overstory can vary in a longleaf stand as long as frequent fire is used to maintain the natural ground cover. Frequent and well-managed fire favors regeneration and growth of longleaf pines and allows the conversion of mixed pine or mixed pine/hardwood stands to stands resembling natural longleaf communities with native ground cover composition. Management with fire, herbicides or mechanical means may be required for land to qualify as wildlife conservation land.

Appendix III: Wildlife Reserve Land Management Activities

The Wildlife Reserve Land (Criterion 3) of the Wildlife Conservation Land Program (WCLP) is land that is actively and regularly used as a reserve for hunting, fishing, shooting, wildlife observation, or wildlife activities. Land primarily used and managed to maintain other human uses such as large lawns, golf courses, production agricultural fields, monoculture hayfields, and commercial timber stands provide limited wildlife habitat value and will not qualify as wildlife reserve land.

To qualify for this criterion the land must meet all ownership types, acreage minimum, and ownership tenure requirements of the WCLP and be managed according to a Wildlife Habitat Conservation Agreement (WHCA) between the landowner and the North Carolina Wildlife Resources Commission (NCWRC). The WHCA must document that at least three of the seven management activities prescribed by law exist or will be implemented on the enrolled acreage. General descriptions of the seven management activities are provided below.

Supplemental Food

Supplemental food is defined as annual or perennial noninvasive plantings established and maintained to provide a direct or indirect source of food or nutrition for wildlife resources. The typical description of this activity is a “food plot”. Plot location should receive enough sunlight to successfully grow the plants to be established. This may require trees and debris be removed to make plots viable. In addition, soil condition should be evaluated and amended to ensure proper fertility and pH. Areas with heavily compacted soil, such as pastures and logging decks, may require sub-soiling or other methods to break up compacted soils and increase productivity. NCWRC biologist will provide plot specifications to meet desired goals.

- Plot established with herbaceous species: Clover, millet, grain sorghum, wheat, corn, soybeans, peas, turnips, chicory and alfalfa are just a few of the species which are typically planted for food plots. These plots serve as an attractant for hunting and wildlife viewing opportunities. Depending on the acreage of the plot and the condition of the surrounding landscape some nutritional benefit may be realized from these plots as well. There is a great deal of information available from academic research and commercial vender advertisements to assist with seed selection. Where possible, incorporate no-till planting techniques to maintain soil health and fertility, increase invertebrate populations, reduce weed competition and limit erosion in the plots.
- Plot established with native pollinator habitat: Plantings dominated by native wildflower species can provide significant benefit for native bees, wasps, butterflies and moths. These plantings also provide seed for songbirds and increase food for insectivores. Plantings should include multiple species which flower throughout the spring, summer and fall. A minimum of 9 native flowering herbaceous species should be included in these mixtures. Native flowering shrubs may be included in plots to add bloom diversity and structure. Site preparation is critical in getting these species established and care

should be taken to effectively control weeds before planting. More information can be found at online at the [NC Pollinator Conservation Alliance](#) and the [Xerces Society](#) websites.

- **Mast producing tree/shrub establishment:** Trees that produce fruits consumed by wildlife are referred to as mast producing species. Common mast species include persimmon, oak, hickory, pear, crabapple, and beech. Less often thought of mast species include grape, dogwood, elderberry, sumac and native plums. Species of plants to establish will depend on the wildlife species of interest.

Supplemental Water

Supplemental water includes existing man-made water features as well as those that will be installed or maintained for the benefit of wildlife resources. Surface water and wetlands are critical for many species of native living creatures. Care should be taken to maintain these habitat types to enhance recreation opportunities and increase species diversity. NCWRC biologist will provide management specifications to meet desired goals.

- **Perennial pond/lake:** The vast majority of ponds and lakes in North Carolina are man-made. Terms such as fish pond, farm pond or reservoir are often used to describe these bodies of water. Water quality should be protected in these ponds/lakes. Where possible, shrubby cover should be maintained along the banks, and natural woody debris should be retained to increase habitat and invertebrate diversity.
- **Impoundment w/ control structure:** Impoundments which are installed with water control structures can provide important habitat for waterfowl, wading birds and amphibians. Vegetation management and drawdown periods can greatly impact habitat quality within these impoundments. Food value can be improved by planting grain crops during the draw down or using moist soil management to improve vegetation diversity. Impoundment design and water level management may be tailored to provide breeding habitat for amphibians such as frogs and salamanders.
- **Intermittent pools:** These pools do not have a water control structure but do periodically dry up. Their intermittent nature results in no fish inhabiting the pools. The absence of fish predation makes these pools important for amphibians. Installing and managing these often-overlooked wetlands can benefit declining species.
- **Other waterbodies and wetland features may qualify as supplemental water.** The NCWRC must approve additional qualifying sources in writing for inclusion in the WHCA.

Supplemental Shelter

Supplemental shelters are natural or artificial structures created and installed to provide shelter from the weather, nesting sites, or escape cover from predators. Structures installed in aquatic habitats meet criteria for this activity. The prescribed quantity and recommended design of structures will be dependent on the current condition of the property as well as the needs of targeted wildlife species. NCWRC biologist will provide detailed specifications for type, location and quantity of structures to meet desired goals. Simply installing a structure is not the end of the responsibility. To make sure use of the structure is maximized, annual inspection and maintenance is needed. The following links provide valuable information on building, installing and maintaining various types of shelter.

- [Building Songbird Boxes](#)
- [North Carolina Wood Ducks](#)
- [Building an Osprey Platform](#)
- [Bat Houses](#)
- [Woodland Wildlife Nest Boxes](#)
- [Nests for Native Bees](#)
- [Snags and Downed Log](#)
- [Brush Pile Construction](#)
- [Pond Management Guide](#)

There are many types and designs of supplemental shelter. It is the landowner's responsibility to confirm that any changes to shelter specification are approved in writing by NCWRC staff. This approval will be retained, attached to WHCA and available during periodic agreement review.

Habitat Control

Habitat control involves the implementation of practices to establish, restore or enhance upland, wetland, riparian, or aquatic ecosystems to improve wildlife habitat. In addition, activities which maintain or protect desirable habitats from degradation are considered habitat control. The practices prescribed on a given tract will depend on the specific habitat needs of the native animal species for which the landowner desires to manage. Many of our uncommon native wildlife species are known as specialists, meaning they require a specific habitat type to survive. Animals with more generic habitat needs are called generalists. A NCWRC biologist can aid in identifying areas and methods that best meet a landowner's goals and objectives for wildlife habitat on their property. They will also develop detailed management prescriptions as part of the WHCA. WCLP participants should clearly document their habitat control efforts to ensure the requirements of the WHCA are met.

Examples of habitat control to establish, enhance, or manage wildlife habitat include:

- Prescribed burning in open forest stands to enhance groundcover
- Establishing native herbaceous vegetation to develop early succession habitats

- Tree and shrub planting to improve diversity and structure
- Fencing livestock from surface water areas to enhance aquatic and terrestrial habitats
- Manage forest to develop and maintain climax natural community
- Herbicide treatment to control undesirable vegetation
- Manage early succession habitat with disking or prescribed burning
- Manage early succession or bog habitat areas with rotational grazing
- Install instream structures to allow passage for aquatic or semi aquatic species

Erosion Control

Erosion Control is the implementation of practices to prevent, reduce, or minimize soil erosion. Erosion reduces habitat quality in both terrestrial and aquatic systems. Movement of soil by wind and water reduces fertility and soil biology of upland sites. Sediment washing into creeks, streams and rivers is the top water pollutant in North Carolina. Limiting erosion can increase dissolved oxygen levels in a water course, improve aquatic organism reproductive success and maintain potability for a wide range of species. Practices established for erosion control shall not be known to harm wildlife or include invasive plant species. NCWRC Biologist can provide guidance in developing specifications to address erosion concerns.

Examples of management practices to address erosion on your property include:

- Streambank stabilization
- In-stream channel stabilization
- Grading, shaping and establishing vegetation to reduce erosion
- Grade, stabilize, water control structures on active roads
- Filter strip installation
- Riparian buffer installation
- Sediment catch basin installation
- Exclude future traffic from road
- Other (attach description for approval by NCWRC staff)

Predator Control

Predator control is implemented to reduce the abundance of a species or suite of species that preys on any life stage of wildlife species for which the land is managed. While predators are most often thought of as an animal that catches, kills and eats another animal, nest predators which destroy nests or consume eggs of ground nesting birds and reptiles should not be overlooked as a source of significant mortality. For the purpose of the WHCA, predator control also includes removal of non-native invasive animal species to manage or protect wildlife and their habitats. All laws must be adhered to where predator control is part of a WHCA.

- Trapping - In Season by licensed trapper: While not as common as it once was, trapping is still an activity which many citizens participate in. Whether a landowner traps on their own property or allows a licensed trapper to access their property this can be an effective tool to remove fur bearing predators from a tract of land. For more information visit the [Trapping in North Carolina](#).
- Trapping for species conservation: There are some situations in which landowners may trap predators outside of normal trapping seasons. Most often these conditions require a special permit or must occur in a depredation scenario. More information can be found on the [NCWRC depredation webpage](#).
- Swine trapping/shooting to protect habitats: Feral swine are a very destructive non-native animal species. Their voracious feeding style can damage soil, degrade plant communities and directly impact populations of ground nesting birds, reptiles, amphibians, mammals and insects. Swine are prolific breeders, having multiple litters of piglets each year and the young can reproduce as early as 6 months old. More information can be found at the [NCWRC feral swine webpage](#).
- Predator hunting: A single landowner's effort to kill predators by hunting will have little impact on the population across the landscape. In most instances quality habitat with prey populations will attract predators from surrounding properties. Killing one or two individual predators from a property will allow space for another individual to move in. Successful predator control requires intensive effort maintained over long periods. Seasons and regulations for most predator species can be found on the [NCWRC small game and other seasons webpage](#).
- Other predator control measures may qualify under this management activity. These must be defined and approved in the WHCA.

Census of Animal Populations

Census of animal populations is conducting or participating in periodic surveys and inventories to determine the presence, number, composition, biological condition, or human use of wildlife. Due to the transient nature of wildlife and typical land ownership patterns across much of North Carolina, qualifying census or survey must be part of an organized effort or protocol approved in the WHCA. Several qualifying efforts are listed below however, other projects may meet the criteria for this management activity. To reduce future misinterpretations the landowners should confirm, in writing, that the project they wish to participate in meets NCWRC criteria.

Census / Survey efforts

- [NC WRC Deer Hunter Observation Survey](#)
- [NC WRC Turkey Brood Survey](#)

- [NC WRC Avid Grouse, Quail, Rabbit Hunter Survey](#)
- [NC WRC Deer Management Assistance Program](#)
- [North Carolina's Candid Critters](#)
- [Dragonfly Pond Watch Program](#)
- [Bumble Bee Watch](#)
- [Native Buzz](#)
- [The Great Sunflower Project](#)
- [The Great Backyard Bird Count](#)
- [Christmas Bird Count](#)
- [Hummingbirds at Home](#)
- [NestWatch](#)
- [FrogWatch USA](#)
- [Osprey Watch](#)
- [eBird](#)
- [iNaturalist](#)
- [Project FeederWatch](#)
- [US Nightjar Survey Network](#)
- [North American Breeding Bird Survey](#)
- [Calling Amphibian Survey Program](#)
- Other (Protocol details, approved by NCWRC staff, must be attached):