

# Grant Proposal for the Landowner Incentive Program

## Tier-2 Proposal for FY 2007 Funding

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## **ABSTRACT – New Jersey Landowner Incentive Program Tier-2 FY2007**

The Division of Fish and Wildlife's Endangered and Nongame Species Program (ENSP) has long recognized that New Jersey's endangered and threatened species do not conveniently occupy only government owned lands and developed the Landscape Project to address that gap. The Landscape Project focuses on large regions that are ecologically similar with regard to their plant and animal communities. In 2002, The Division of Fish and Wildlife's ENSP established a private landowner incentive program, allowing us to work with landowners to protect or restore habitats that benefit at-risk-species.

The Landowner Incentive Program projects will occur statewide, however, ENSP used the Landscape Project to determine three priority project areas for the state: grasslands, Cape May peninsula, Indiana Bat, and Bog Turtle. Early successional habitats are rapidly declining due to development pressure, habitat degradation and intensive farming practices. In the last three decades New Jersey has lost 40 percent of the remaining important migratory bird stopover habitat on the lower third of the Cape May Peninsula and approximately 50 percent of the state's bog turtle habitat has disappeared during the same period. There is clearly an urgent need to proactively manage and develop sound conservation practices for at-risk species in New Jersey's remaining landscapes. LIP Assistance will include technical assistance (implementing New Jersey's Wildlife Action Plan (WAP) and financial assistance).

The overall objective of the Landowner Incentive Program is to provide financial and technical assistance to private landowners to restore, manage and enhance habitat to protect both federal and state listed endangered and threatened species as well as state species of concern. Specifically NJ expects to manage an additional 1000 acres of grassland habitat, restore/enhance two new bog turtle populations, proactively manage maternity roost trees for Indiana bats, continue funding the LIP small grants program, and work with several landowners in Cape May peninsula to restore and enhance important wildlife habitat.

Applicants submit Tier-2 proposals to ENSP which are then ranked using a vetted ranking criteria and the top scoring priority projects brought to our LIP Technical Advisory Committee for review, comments and suggestions. Private lands biologists develop clear, effective scopes of work for each project so money is well spent and the management practices have been designed for the target species. The best projects are selected for funding until all the available funds are awarded. NJ ENSP will administer the LIP Tier-2 funds under established Department of Environmental Protection standards that meet US F&W Service's federal aid guidelines. NJ ENSP will distribute funds following state policies. Payments are not made to landowners until the LIP Coordinator ensures that the agreed upon terms of the contract have been met. Since these agreements are reimbursement based there is no penalty clause.

NJ LIP implements biological monitoring on every accepted project utilizing Tier-2 funds and volunteers. In 2005, NJ LIP began monitoring LIP projects to collect data to evaluate the effectiveness of the practices using state biologists and the Citizen Science program. NJ recognizes that biological monitoring is critical to determine success of management practices on target species. All landowners are required to allow volunteers or staff on their property to conduct biological surveys. Volunteers and staff collect baseline data on all new grassland projects enrolled in LIP; annual grassland monitoring is conducted throughout the contract

period. All bog turtle projects are monitored at least every other year using trained volunteers and staff. Indiana bat projects will be monitored annually.

NJ clearly demonstrates that the state is able to successfully apply \$849,510 in FY07 LIP Tier-2 funds we are requesting. All of previously awarded funds from FY04 and FY05 have been encumbered to private landowners through signed agreements with the state. In addition, to date, we have encumbered 70% of FY06 funds and have signed contracts with 10 landowners obligating \$532,950.

## Need

New Jersey is the most densely populated state in the nation. Despite New Jersey's protection efforts, which include strict land use regulations and an aggressive open space acquisition program, there is a continued and alarming loss of critical wildlife habitat. In spite of dense population areas, New Jersey contains large mosaics of agricultural, pasture, scrub-shrub, and fallow fields within its boundaries. Unfortunately, early successional habitats are rapidly declining due to development pressure, habitat degradation and intensive farming practices. Based on 1995 land use land cover data, less than 8% of land in New Jersey (approximately 371,331 acres) is in cropland/pastureland of 100 acres or greater much of it in private ownership. In the last three decades New Jersey has lost 40 percent of the remaining important migratory bird stopover habitat on the lower third of the Cape May Peninsula and approximately 50 percent of the state's bog turtle habitat has disappeared during the same period. There is clearly an urgent need to proactively manage and develop sound conservation practices for at-risk species in New Jersey's remaining landscapes.

Although NJ's Landowner Incentive Program (LIP) is open to all landowners, our program places higher priority on early successional habitat, projects adjacent to permanently protected areas, projects that are in the lower 20 kilometers of Cape May Peninsula, and projects benefiting Federally listed species. While New Jersey has 29 listed bird species and 31 avian special concern species, we selected early successional habitat as a priority for LIP funds because over 40% of state endangered birds and nearly 30% of threatened birds rely on grassland or early successional habitat (Appendix 1). The lower 20 kilometers of Cape May peninsula is a nationally recognized migratory bird magnet and faces increasing pressure from development where small patches of intact habitat (i.e. forest, scrub-shrub, meadows) play an important role in terms of food and cover to migratory songbirds and raptors.

While the priorities of New Jersey's LIP focus on projects at a landscape scale, there are many landowners with small projects that would benefit at-risk species. Unfortunately these small projects do not rank high when compared to larger projects. To address this, NJ established a LIP Small Project grant program through Conserve Wildlife Foundation (CWF), a non-profit dedicated to New Jersey's endangered and threatened wildlife. This program has proven extremely popular – a small amount of money to a landowner allows interesting projects to be implemented. Biologists provide technical assistance and CWF provides cost share (up to \$5,000) to implement it. This program has proven to be very successful and will soon run out of funding. Funding this project is also a priority for New Jersey's Tier-2 application.

### Grasslands / Early Successional Habitat

New Jersey is a national leader in protection of environmentally sensitive land, but it also is a leader in advocating and protecting farmland. Despite unparalleled development pressure, New Jersey has succeeded in preserving nearly 15% of its farmland, a higher percentage than any other state. In addition to having the highest percentage of preserved farmland in the United States, New Jersey also has an important dataset for conservation priority species in the Landscape Project and there is much overlap in wildlife protection and farmland preservation in the state. Twelve listed endangered or threatened bird species rely on agricultural grasslands, and Breeding Bird Surveys have documented population declines in the majority of grassland

bird species New Jersey lists as threatened, endangered or priority species including: Savannah and Grasshopper Sparrow, Bobolink, American Kestrel and Eastern Meadowlark. Protecting farmland from development is only part of the equation; agricultural practices such as row and grain crops (corn, soybeans, wheat and rye) and intensive haying do not provide sustainable habitat for ground nesting grassland birds and must be changed or modified to provide such habitat. Grassland dependent bird species are typically area-sensitive, meaning they require large tracts of grassland to successfully breed and disperse. In New Jersey, grassland protection and management programs funded through Farm Bill and other grant programs have historically enrolled only small parcels (under 20 acres). These programs have not provided adequate incentives to interest New Jersey landowners in enrolling large acreages necessary to conserve grassland birds by delay mowing grass or hay. The LIP provides this incentive.

The LIP has established a practice where we pay agricultural landowners to manage existing hayfields or establish grassland habitat and delay mow their hay fields (no mowing between April 1 – July 15). This rental payment offsets the loss of agricultural income they could receive by growing row crops or cutting multiple hay crops in a given season and the delay allows ground nesting birds to fledge young. Landowners enrolling row crop acreage first are provided a cost-share to restore the land to native warm season or cool season grasses and are also paid a cost-share to delay mow those fields. In only three years, the NJ LIP has had incredible success in protecting these vulnerable species – enrolling nearly 3,100 acres of grasslands in a delayed mowing plan. Many of these acres are part of larger tracts of agricultural land providing a large mosaic of habitat for grassland dependent species.

The NJ LIP rental payments allow for landowners to make an economic decision to give up the active agricultural activity that ultimately causes the decline of area sensitive ground nesting grassland birds. Furthermore, for landowners considering selling their land for development, the payments may provide enough economic incentives to keep their land and manage for at-risk species. With LIP rental payments, we are able to secure large acreage in delayed mowing programs, benefiting bird and insect populations of over 30 grassland dependent listed and priority species (Appendices 1 & 2). Without additional LIP funding, we will be forced to move back to protecting small patches of grassland that provide minimal opportunity toward stabilizing increasing population of listed grassland dependent species, particularly bird species.

### Cape May

New Jersey plays a crucial role for migrant landbirds each spring and fall, and the health of stopover habitat may influence population trends of many species. Many of these migrants are listed in New Jersey, including several neotropical passerines and woodland raptors, and are facing alarming regional declines.

The Cape May peninsula is a major concentration area for fall migrants because birds following the coast accumulate on the peninsula before crossing the Delaware Bay. It is critical that there is ample foraging and roosting areas on the peninsula for large numbers of migrants. Northward migration is a rushed affair, and birds require abundant insect food to fuel migration to breeding grounds. Most areas of open land are used by migrants, turning large public and private lands and riparian corridors into vital stopovers. Private landowners with small parcels can make a significant difference for birds achieving the resources they require for successful migration.

Cape May Peninsula faces development pressures due to its coastal and bayside location. Developers seldom leave trees standing and often plant non-native plants and shrubs that are not as beneficial to migrating birds.

The LIP can provide landowners with property on the lower 20k of Cape May peninsula funding for habitat improvement they unlikely would receive elsewhere. LIP funds can be used to restore woodlands through plantings, remove invasive species, and restore estuarine habitats. Without a cost-share funding source and technical assistance that emphasizes the benefit to endangered and threatened species (LIP), many of these landowners do not have the resources to implement projects that benefit migratory birds.

### Bog Turtles

Division of Fish and Wildlife's Endangered and Nongame Species Program (ENSP) has conducted intensive habitat evaluations and presence/absence surveys for the Federally threatened and State endangered bog turtle encompassing over 1,300 wetland complexes leading to the discovery and documentation of some of the most significant bog turtle populations in the species' range. However, a majority of these populations are threatened by deleterious vegetative changes in their habitat and secondary impacts associated with the conversion of rural land into suburbia. This succession quickly makes habitat unsuitable for breeding and a single lost breeding season can adversely impact each metapopulation. Regular, successful breeding is what is needed to keep these populations viable. Illegal collection for the black market pet trade also continues to take a toll on the species. Active management of habitats, land protection, population monitoring, and halting illegal collection must continue in order to preserve the exceptional status of New Jersey's bog turtle stronghold.

LIP provides landowners the ability to pay for activities that maintain an early successional habitat critical to bog turtles. The active management technique is based on the actual degradation or restoration needs of the habitat and includes prescribed grazing, hand and mechanical clearing of invasive species, and biological control of invasive species.

### Indiana Bats

Despite being a federally endangered species, there is currently very little information available on Indiana bats in New Jersey. There are only four known hibernacula in the entire state, all of which occur in the same municipality in northern New Jersey. The population of Indiana bats is regularly monitored in only one of these hibernacula (the Hibernia Mine) through biennial internal surveys of the abandoned mine. The other three known Indiana bat hibernacula are vertical shafts (part of the Mount Hope mine complex) that are either completely or partially unexplored. The landowner of two of these vertical shafts has been awarded a LIP grant to protect and stabilize the shafts.

Recent radio-tracking telemetry studies of Indiana bats have provided maternity roost tree location data in New Jersey's forests. We now have data that will allow us to proactively manage important summer habitat for this species. Indeed, protecting maternity roosting trees is critical to Indiana bat populations in New Jersey and the region. Using location data, biologists can target forest landowners to manage for Indiana bats on their property. Conservation practices regarding timber harvest and forest management will be provided to these landowners. LIP may

provide incentives to landowners to keep trees standing, plant specific tree species, or conduct ecological, selective harvesting during determined safe dates. By keeping maternity roost trees standing, we allow Indiana bats to successfully rear young.

#### Previous Successes with New Jersey's LIP

The NJ Division of Fish and Wildlife's (DFW) Endangered and Nongame Species Program (ENSP) established a Landowner Incentive Program in 2003. Since 2004, NJ has received \$2,360,760 of Tier-2 funds. All of previously awarded funds from FY04 and FY05 have been encumbered to private landowners through signed agreements with the state. In addition, **to date, we have encumbered 70% of FY06 funds and have signed contracts with 10 landowners obligating \$532,950.** Using FY04, FY05, and FY06 funds, New Jersey will have nearly 3100 acres of grassland habitat in a delayed mowing program, of which over 1200 acres will be restored to native warm season meadows benefiting 39 listed and priority species in New Jersey including 12 listed grassland dependent bird species (Appendix 1). To summarize our state's LIP successes,

- 10 bog turtle sites are actively being managed
- 2 mine shafts are being stabilized benefiting the Indiana bat
- 3 projects on Cape May peninsula are being implemented
- 3 forest restoration projects have been awarded
- 40 landowners have contracts with the state (10 of those are going through Treasury).
- 3,061 acres of grassland are being managed
- 1,200 acres of cropland will be restored to native warm season grass
- A small grants program has been established protecting vernal pools, wood turtle nesting sites, scrub-shrub habitat, swamp pink habitat and riparian floodplains.

#### Unmet need and opportunity for at-risk species in New Jersey

While New Jersey has made impressive steps towards protecting habitat for at-risk species, more needs to be done. Grassland bird species are area sensitive (Upland Sandpipers require approximately 250 acres) and require active management such as delayed mowing to achieve sustainable populations. New Jersey also has identified potential grassland focal areas (Figure 1) and LIP funds are the one of the most effective means to establish and grow our grassland management areas.

Currently, New Jersey has four private lands biologists working regionally to provide landowners technical assistance to manage their property for wildlife or ecological sustainability. All these biologists consider LIP to be a vital program providing landowners with real incentive to manage for wildlife, particularly grassland birds. Their work resulted in a great number of high quality landowner proposals for FY06 funding. Seventy-three landowners applied for funding but we were only able to select 17 due to insufficient funding. The result was that a numerous high quality projects were rejected due to lack of funding, demonstrating that there is clearly a need for additional LIP Tier-2 funding in New Jersey.

Based on our accomplishment of establishing and implementing a Landowner Incentive Program, the New Jersey Division of Fish and Wildlife's Endangered and Nongame Species Program (ENSP) respectfully requests Tier-2 funding in the amount of **\$849,510.00** from the

Department of the Interior, Fish and Wildlife Service FY07 Landowner Incentive Program for States Tier-2 grant. Based on our previous Tier-2 grant awards, we expect to encumber the majority of funds in landowner contracts within one year of our award. The Tier-2 LIP monies will allow us to continue our proactive protection of vital parcels to protect and improve the status of our endangered and threatened species through restoration and management of private lands.

Clearly, NJ LIP is an established, effective program where we receive more requests for funding than we can fund. FY07 Tier-2 funding will continue the momentum we began in 2004.

Without funding in this cycle, New Jersey will not have a Landowner Incentive Program and much of the efforts toward protecting declining species will falter.

**Objectives** – *proposal provides clear objectives that specify fully what is to be accomplished.*

The overall objective of the Landowner Incentive Program is to provide financial and technical assistance to private landowners to restore, manage and enhance habitat to protect both federal and state listed endangered and threatened species as well as state species of concern.

While our ranking criteria awards higher points for those projects that will protect or manage for federally listed species, the majority of our projects manage for state listed species. Based on our accomplishments over the last three years we anticipate achieving the following objectives using FY07 funds:

- Enroll an additional 1000 acres in a delayed mowing program, protecting habitat for 19 state listed endangered grassland dependent species, including 12 bird species (Appendix 1).
- Restore 500 of those acres to native warm season grass fields; increasing biodiversity and nectar and host plants for 5 state listed endangered invertebrate species (Appendix 2).
- Develop management plans for 3 landowners that have been identified as having roost trees used by the Federally endangered Indiana bat on their property.
- Enroll 1 known bog turtle sites (either historic or active) in appropriate management activities.
- Restore and manage 5 acres of early successional habitat and 4 vernal pools in Cape May Peninsula protecting migratory habitat for raptors and passerines as well as the Eastern Tiger Salamander (NJ Endangered).
- Extend the LIP small grants program with Conserve Wildlife Foundation by awarding them \$75,000.
- Develop 50 farm conservation plans using private lands biologists with at-risk species being identified and managed for.
- Contact and provide technical assistance to 50 landowners through LIP using NJ HIT private lands biologists.
- During the Agreement period (typically 5 years), increase Eastern tiger salamander usage of enrolled historic or active vernal pool sites.



- During the Agreement period (typically 5 years), increase bog turtle numbers by at least 10% on LIP sites.
- Determine effectiveness of managing maternity roost trees for Indiana bat.
- During the Agreement period (typically 5 years), increase the following grassland dependent bird species by at least 20% on LIP sites
  - Grasshopper Sparrow
  - Bobolink
  - Savannah Sparrow
  - Eastern Meadowlark
  - American kestrel

**Expected Results and Benefits** – *proposal clearly describes how the activities will benefit targeted at-risk species.*

The State of NJ LIP Tier-2 grant will provide technical and financial assistance for projects on private lands that are ranked highest using our ranking criteria (Appendix 3). Because our ranking criteria was designed to give federally listed species higher points, accepted projects will protect and restore habitat that will potentially benefit 3 federally listed species including the bald eagle, bog turtle and Indiana bat. Over 50 state threatened and endangered species within our conservation priorities may benefit from protection and restoration of important habitat including 31 bird and insect species found within grassland habitats (Appendices 1 & 2).

Grassland

Grassland dependent bird species are area sensitive requiring large, contiguous grassland patches (i.e. upland sandpipers require a minimum area of 250 acres). Specifically, we anticipate that our focus on managing and restoring large grassland habitat through delayed mowing and establishment of cool or warm season grasses will result in the following:

1. Increase the number of the following ground nesting birds (area sensitive species requiring large, contiguous grassland habitat; average 20 acres minimum patch size).
  - Grasshopper Sparrow (state listed Threatened); 20%
  - Savannah Sparrow (state listed Threatened); 15%
  - Vesper Sparrow (state listed Endangered); 10%
  - Bobolink (state listed Threatened ); 20%
  - Eastern Meadowlark (state priority concern species); 20%
  - American kestrel (proposed state Threatened) 20%
  - Upland Sandpiper (state listed Endangered)
  - Henslow’s sparrow (state listed Endangered)

\* By delaying mowing until after July 15<sup>th</sup>, we ensure that ground nesting birds using these patches will fledge at least one brood thereby increasing population numbers. Delayed mowing provides both short-term (immediate increase in fledgling success) and long-term (increase in population numbers and dispersal of second year birds to new locations).

2. Increase potential habitat for the following grassland dependent species:

- American Kestrel (proposed state listed Threatened; most LIP sites are part of ENSP's pilot Kestrel Nest Box program – ENSP staff began monitor nest boxes for success in 2006.
- Northern Harrier (state listed Endangered); 20% of the grassland enrolled in LIP will remain standing for winter habitat; critical foraging habitat.
- Short-eared owl (state listed Endangered); 20% of the grassland enrolled in LIP will remain standing for winter habitat; critical foraging habitat.

3. Establish new populations of the following grassland species due to our conversion of cropland to either cool season or native, warm season grass in delayed mowing program. The short-term benefits of these conversions are immense because prior to conversion, these agriculture fields were unsuitable for grassland birds or wildlife. Conversion of cropland to grass/hayfields also provides a benefit to water quality. Much of this farmland enrolled in LIP is permanently protected (providing long-term benefits to bird populations); it is our hope that we will establish permanent protection of the remaining fields during the LIP contract period by working with the landowner.

- Grasshopper Sparrow (state listed Threatened)
- Savannah Sparrow (state listed Threatened)
- Vesper Sparrow (state listed Endangered )
- Bobolink (state listed Threatened )
- Eastern Meadowlark (state priority concern species)
- American Kestrel (proposed state listed Threatened)

To summarize, LIP Tier-2 FY 2007 funding will enroll 1000 acres of grassland in a delayed mowing regime and of that, restore at least 500 acres to warm season grass. These projects will protect at least six species increasing populations of Grasshopper Sparrow, American Kestrel, Savannah Sparrow, Bobolink and Eastern Meadowlark due to conversion of cropland to native warm season grass. If we are successful in enrolling an additional 1000 acres into a delayed mowing program in 2008, NJ will have over 4,000 acres of grassland habitat being managed for grassland bird species.

These projects provide immediate (5-10 years) short-term benefits by 1) converting existing corn or soybean fields into warm season grass providing nesting habitat for six listed grassland bird species and 2), delay mowing provides ground nesting birds the ability to fledge at least one brood. Expanded partnerships with USFWS, NRCS, Department of Agriculture, and the Farm Service Agency is also an important short-term benefit. Increased communication with landowners provides short and long-term benefits for DFW and declining species. The long-term benefits (10+ years) are: 1), populations of grassland bird species increase significantly to consider down-listing or de-listing and 2) establishing positive relationship with landowners that will assist us in working with these landowners to permanently protect their properties, or enrolling them in longer term conservation programs.

### Indiana Bats

Indiana bat maternity colonies require trees with exfoliating bark, cracks, or cavities with direct sun exposure for the majority of the day. Tier-2 funds will assist in the development of conservation plans for roost trees on private lands that provide important habitat for the federally endangered Indiana bat (*Myotis sodalis*) and the more common little brown bat (*Myotis lucifugus*). These projects will make an important contribution to New Jersey's Indiana bat population by ensuring that roost trees are kept standing and therefore can continue to be used by the bats.

1. Identify and manage Indiana bat maternity roost trees and surrounding woodlands to protect known sites and increase potential habitat.
2. Develop a fair and equitable system for managing roost trees (i.e. cost of not harvesting a tree for timber over the course of 5-10 years).
3. Maintain management and monitoring of gated Indiana bat hibernacula.

The short-term benefits to this project are the direct protection of individual Indiana bat roost trees and adjacent foraging habitat. Increased positive communication between DFW and landowners is an important short and long-term benefit. The landowners can potentially enter into a signed agreement that protects roost trees for 5 to 10 years. The long-term benefits of interacting with these landowners include permanent protection of important roost sites, creation and enhancement of roosting and foraging habitat, and a potential increase in Indiana bat populations in New Jersey.

### Cape May

Cape May peninsula contains important woodland complexes threatened by development. Tier-2 funds may provide cost share to landowners for the restoration and management of these habitats. It is anticipated that projects will focus protection of early successional (scrub-shrub) woodland complexes and vernal pool restoration.

1. Protect and manage early successional and woodland habitat in lower 20 kilometers with either timber management plans, invasive species control (mechanical or chemical), and plantings for the following species and species suites:
  - Red-headed woodpecker
  - Woodland raptors
  - Migratory passerines
  - Herps
2. Vernal pool restoration increasing potential habitat for the following species:
  - Eastern Tiger Salamander (NJ Endangered)
  - Cope's or Southern Gray Treefrog (NJ Endangered)

Short-term benefits of LIP projects in Cape May include increased and positive interactions between the state and landowners, partnerships between USFWS and DFW, and decreasing the loss of habitat. Long-term benefits include permanent protection of important woodland.

### Bog Turtle

Bog turtles require open, early successional wet meadow type habitat. Specifically, we anticipate that the technical assistance and potential projects involving prescribed grazing and fencing will result in the following.

1. Increase the potential habitat of historic turtle sites thereby increasing the availability of that habitat to bog turtles.
2. Maintain known and active bog turtle sites in an early successional stage.

The short-term benefit of these projects is the restoration and maintenance of active and historic bog turtle sites providing sustainable population numbers; without active management many of these sites could become unusable for the turtles resulting in decreased nesting and a decrease in bog turtle numbers. The long-term benefits include positive relationship building with landowners resulting in voluntary management of their land for bog turtles; increased awareness of the threats and management needs of bog turtles, and increased numbers of bog turtles.

### LIP Small Grants

Due to the simplified contractual requirements for these small-scale projects a variety projects for targeted at-risk species have been awarded including bog turtle, wood turtle, and box turtle. Vernal pool creation, invasive plant control, and wetland management projects that cost less than \$5,000 have been funded. The major short term benefit for these projects is that biologists can act quickly to get an important project funded and protect a population of at-risk species. The long term benefit is that these projects are likely to continue as the landowner is vested in it. The ability of the state agency to proactively work with a landowner goes far in terms of good will and relationship building. Projects funded through the small grants are varied but are expected to include:

- Fund at least 14 projects under \$5,000.
- Management of bog turtle sites
- Creation of nesting sites for wood turtle
- Managing 1 Indiana bat maternity roost site
- Restoration degraded vernal pools
- Targeted invasive species removal

**5. Approach** - *Proposal clearly describes how program objectives, contractual and fiscal management and fund distribution will be accomplished and monitored.*

### ***Program Implementation***

The conservation priorities for New Jersey's LIP are as follows.

#### GRASSLAND

To protect grassland bird habitat, NJ LIP pays the landowner an accepted and justifiable rental payment to delay grassland/hay field mowing until after July 15<sup>th</sup> allowing for ground nesting birds to fledge at least one brood. Grassland agreements are 5 to 10 years in duration.

Additionally, we require the landowner leave a minimum of 20% of the field standing in the winter to provide cover. The landowner must mow at least once every three years between July 16 – April 1 to manage for woody shrub growth. LIP will also work with the landowner to convert existing cropland into warm season grass fields and enroll them in the delayed mowing program. The cost of restoration is paid by NRCS and Partner's for Fish and Wildlife. The delayed mowing rental rate paid to landowners or tenant farmers was established using average corn yield for a six year period. The established rate is \$150/acre/year (Appendix 4).

Planting of native warm season grasses is done in spring or fall using a Truax drill. The actual site prep prescription varies according to field condition – NRCS best management practices are used by the biologists and written into each scope of work. These projects presently are the majority of NJ LIP projects due to landowner interest and successful outreach by regional private lands biologists. An example of a LIP grassland scope of work is attached to this proposal (Appendix 5).

To further increase our chance of success to increase grassland ground nesting birds and potential de-listing or down-listing of several species, NJ HIT developed a potential grassland focal area map for New Jersey (Figure 1). This map identifies major clusters of agricultural lands using available Geographic Information System layers (GIS). The focal maps will give our private lands biologists the ability to focus their attention on the areas that have the greatest ability to protect and manage for populations of grassland bird species due to their area sensitivity.

#### CAPE MAY PENINSULA

NJ LIP awards higher points to those projects in the lower 20 kilometers of Cape May Peninsula. The private lands biologist in that region will conduct outreach in the region which will likely result in several high quality proposals from landowners. Potential projects we may fund include vernal pool restoration projects benefiting the Eastern Tiger salamander (NJ Endangered) along with woodland raptors and migratory passerines. LIP would cost-share the project which may involve labor (cutting vegetation and planting beneficial shrubs). Vernal pool restoration typically includes hand clearing of overgrown vegetation and increasing canopy openings above the pool. It is expected that both landowners and contracted vendors will participate in the implementation. Ecological forest stewardship plans may also be submitted based on landowner interest in that type of project. LIP would cost-share the cost of developing these plans; typically a qualified consulting forester writes the plans based on a site visit, the desire of the landowner, the species found on site, and the potential habitat. These plans would benefit migratory birds by allowing the understory to grow, providing food and cover; selective harvesting plans based on the needs of wildlife should increase the number of snags (benefiting Red-headed Woodpeckers NJ threatened) and the number of large trees. All habitat work would be conducted when it would have the least impact the on the target species (i.e. non-breeding season).

The methodology for establishing cost shares for practices is to use practice rates determined by NRCS that are specific for New Jersey. If an NRCS practice rate is not available, we will request that the landowner obtain 3 bids and will select the best bid for the job.

### BOG TURTLE

The NJ LIP has funded several successful projects using prescribed grazing for bog turtles. NJ LIP pays either the landowner or a contracted farmer to provide appropriate grazers (cows, goats or sheep) to a bog turtle site. Grazers keep sites in an early successional stage by eating woody vegetation, the disturbance of the animals also appears to maintain clump grasses or hummocks which are important bog turtle nesting habitat. Potential bog turtle LIP projects may also include fencing in the upland habitat to keep the prescribed grazers in the wetland. The type of grazer depends on the actual degradation of the site, the amount of woody vegetation being managed for, and the recommendation of the biologist.

The methodology for establishing cost shares for practices is to use practice rates determined by NRCS that are specific for New Jersey. If an NRCS practice rate is not available, we will request that the landowner obtain 3 bids and will select the best bid for the job.

### INDIANA BAT

To protect and promote Indiana bat summer habitat, NJ LIP will compensate landowners to plant, manage for, and/or retain trees with exfoliating bark or natural cavities that receive long hours of direct sun exposure (more than half of the day) and are within 1 mile of a wetland or water feature. Silvicultural practices should favor the creation and retention of suitable roost trees, including the development of multiple age classes so that a sustainable supply of large diameter, mature and over-mature trees is assured through the foreseeable future. Uneven-aged management or even-aged management that includes provisions for snag retention may be used. Large diameter, standing dead trees, especially those at forest edges or in the open, should be retained.

Planting of new trees should include a variety of deciduous species known to be used by Indiana bats, including oak, ash, elm, and especially shagbark hickory. To increase sun exposure to potential roost trees, selective harvesting of adjacent trees can be used to create openings within a forest. Selective timber harvesting should not be conducted between April 15 and September 15. In addition, girdling of select trees may help promote exfoliation of bark.

The methodology for establishing cost shares for practices is to use practice rates determined by NRCS that are specific for New Jersey. If an NRCS practice rate is not available, we will request that the landowner obtain 3 bids and will select the best bid for the job.

### SMALL GRANTS

Small grant projects are reviewed and selected by ENSP biologists based on urgency of need, species to benefit, project's contribution to a species population, and ability of landowner to implement the project. As the projects submitted are varied, the LIP Coordinator works with the appropriate biologist to develop scope of work and determine if the project is worthy of being funded. Once accepted, the scope of work is finalized, a budget is determined and monitoring methodology is developed. Compliance and biological monitoring is conducted by both state and private lands biologists. The Conserve Wildlife Foundation ensures contractual compliance and reimbursement of project costs.

### *The Local, State and Regional Scale*

NJ LIP is an integral part of New Jersey's Wildlife Action Plan. In fact, LIP is explicitly identified as an action addressing the statewide threat of "Unsustainable Land Management Practices on both Private and Conserved Lands and Waters". LIP is also listed within each of our Wildlife Action Plan regions as a tool for private landowners to use to implement conservation actions for species of greatest conservation need that we have identified for that region.

Additionally, LIP was the impetus for the Division of Fish and Wildlife developing the NJ Habitat Incentive Team (NJ HIT), a coalition of state, federal, sportsmen, and conservation groups vested in habitat and wildlife protection. NJ HIT offers a one-stop shopping program where a private lands biologist will conduct a site visit and determine which incentive program is most appropriate for the habitat, species present, and landowner's needs; LIP is one of those incentive programs. NJ HIT has four regional state private lands biologists working with NRCS and the local community to providing outreach, and better service to landowners in terms of good stewardship practices and cost share programs available to them. Moreover, because LIP is attracting landowners with larger grassland/agriculture patches, we have established a partnership with NRCS and USFWS Partner's Program to fund restoration and management of those lands enrolled in LIP. In New Jersey the programs compliment each other with each cost-sharing different parts of the project. With this pooling of resources, NJ is able to protect large tracts of grassland by partnering with other federal programs making our funding go further.

Proposed activities (grazing, invasive species control and fencing) to manage habitat for the Federally threatened bog turtle will implement recovery tasks identified in the USFWS Recovery Plan for the Bog Turtle (*Clemmys muhlenbergii*) (2001). Similarly, proposed activities to protect and manage caves for Indiana bats will implement recovery tasks described in the USFWS Recovery Plan for the Indiana Bat (1983).

#### **System for Fund Distribution** – *proposal describes State's fair and equitable system for fund distribution.*

Our program has developed a fair and equitable system for distributing funds to landowners based on a step-wise process. First, New Jersey announces the availability of funds in LIP and posts a Request for Proposals in the state register, our list server (over 40,000 email addresses), our partner's newsletters and web pages, and the local NRCS field offices. Requests for funding and informal proposals from landowners are received and reviewed by the LIP Coordinator or our partner Private Lands Biologists based on species sightings in Landscape Project. If the project ranks a one or above (suitable habitat), a private lands biologist will conduct a site visit, assist the landowner in developing a full LIP proposal suitable for the habitat on the property and meets the landowner's needs. The full proposal is then submitted to the LIP Coordinator for review.

All submitted LIP proposals are ranked using the Ranking Criteria Form (Appendix 3) by LIP Coordinator and the results are presented to a working group of the LIP Technical Advisory Committee and the private lands biologists implementing LIP projects. Because the private

lands biologists have detailed knowledge of the site, NJ LIP has granted those biologists the ability to rank the projects. The working group discusses the merits of each proposal and if necessary projects are re-ranked. Those that score above 65 are presented to our LIP Technical Advisory Committee for final review. The Committee provides project evaluation, discusses feasibility and potential issues and makes selection recommendations. The best projects are selected for funding until all the available funds are awarded.

The LIP Technical Advisory Committee is made up of a diverse group of people including representatives from U.S. Fish & Wildlife, NRCS, NJ Audubon, The Nature Conservancy, NJ Department of Agriculture, two farmers, and a consultant. David Wilcove from Princeton University is an ad hoc member. The Technical Advisory Committee provides valuable assistance in determining likelihood of success, cost benefit analysis, and goodness of fit. By having such a diverse advisory committee, we established both the transparency this program depends upon and its availability to all types of landowners in New Jersey. While NJ LIP focuses on the conservation priorities described above, we accept, review and rank all proposals that will benefit threatened or endangered species.

**Fiscal Administrative Procedures** – *proposal describes adequate management systems for fiscal and contractual accountability.*

In order to obligate LIP funds to private landowners, the LIP Coordinator, working with DEP's Budget and Contract Office, developed a grant agreement form that was approved by the NJ State District Attorney General for use for state / landowner LIP contracts (copy of the contract available upon request). The legal contract instrument we developed was a customized modification of our standard mini-grant agreement and is a reimbursement contract.

The NJ LIP also developed a justifiable, fair and equitable rental rate to pay landowners enrolling in our delayed grassland program, justified with Federal Aid our volunteer rate, secured a list of activities that our SHPO signed off on and established protocol to ensure contractual compliance of landowners (call before you cut).

NJ ENSP will administer the LIP Tier-2 funds under established Department of Environmental Protection standards that meet US F&W Service's federal aid guidelines. NJ ENSP will distribute funds following state policies. Payments are not made to landowners until the LIP Coordinator ensures that the agreed upon terms of the contract have been met. All accepted landowners must sign the mini-grant agreement and complete a form setting them up in the state Treasury system.

Because these agreements are reimbursement based, there is no penalty clause. If the landowner does not comply with the agreed upon terms, s/he will not be paid. Additionally, we used USDA/NRCS cost table to set flat rates for management activities (mowing, invasive species control, etc) to ensure reimbursement rates are necessary and reasonable.

**Monitoring** – *proposal describes State's biological and compliance monitoring plan for LIP including annual monitoring and evaluation of progress toward desired program objectives, results, and benefits.*



### Compliance Monitoring

The LIP contracts are considered annual reimbursement grants and the landowner must meet the outlined contractual obligations to be paid. We monitor and verify that the agreement is in compliance by conducting annual site visits. The landowner submits an invoice for payment and either the LIP Coordinator or a regional private lands biologist will confirm compliance. Payment is made only if landowner is in compliance; if a landowner is not in compliance, no funds are paid to that landowner for that year. The landowner does have the ability to re-establish compliance the following year and receive payment upon compliance. Landowners in the delayed mowing projects must call the LIP Coordinator, or their regional private lands biologist, before they mow (after July 15) to ensure compliance. NJ Office of Budget and Finance requires the LIP Coordinator to submit a status report for each contract outlining status of each deliverable within that contract. Since these are reimbursement grants, if a landowner is not in compliance and breaches the scope of work in the contract, s/he is simply not paid. However, if a landowner is out of compliance two consecutive years, New Jersey will notify the landowner that we will cancel the contract due to lack of compliance.

### Biological Monitoring

NJ LIP implements biological monitoring on every accepted project utilizing Tier-2 funds and volunteers. In 2005, NJ LIP began monitoring LIP projects to collect data to evaluate the effectiveness of the practices using state biologists and the Citizen Science program run by NJ Audubon Society (NJAS). NJ recognizes that biological monitoring is critical to determine success of management practices on target species. All landowners are required to allow volunteers or staff on their property to conduct biological surveys. To protect both landowners and volunteers, volunteers are also required to become Wildlife Conservation Corps members which provides insurance (eliminating the fear of liability insurance for landowners). Volunteers and staff collect baseline data on all new grassland projects enrolled in LIP; annual grassland monitoring is conducted throughout the contract period. All bog turtle projects are monitored at least every other year using trained volunteers and staff.

### Grasslands

NJ, DE and NY LIP are working toward implementing a coordinated grassland management evaluation protocol in order to evaluate the effectiveness of our grassland projects on a regional scale using Tier-1 funding. In 2006 NJ began a statewide effort in evaluating grassland management techniques with a focus on LIP sites. All LIP sites are monitored using a protocol vetted by a team of biologists (including NJ Audubon Society, ENSP, Rutgers University, and Delaware DNR) (Appendix 6). Additionally, several Natural Resource Conservation Services Wildlife Habitat Incentive Program (WHIP) sites are monitored as well as a sub-set (sample) of ENSP's established roadside grassland surveys which will be used as baseline. The goal of this monitoring program is to determine the effectiveness and grassland bird's response to various management techniques.

The analysis of these data will allow us to determine bird response to management regimes and implement adaptive management based on those results. Funding for this component is provided by NJ Audubon Society and Tier-1.

### Indiana Bat

Indiana bat maternity roosts will be monitored by ENSP biologists and other trained professionals by conducting emergence counts at roost trees. Pre- and post-management surveys using mist-nets, harp traps, or acoustical recording devices may be conducted to determine changes in Indiana bat presence within management areas.

A New Jersey ENSP biologist (using State Wildlife Grants funding) will work with USFWS and biologists from New York and Pennsylvania to monitor the success of last year’s cave gating project (which will be completed in 2007). Data will be shared with the researchers to determine bat response to mine protection and thereby enable us to evaluate project success.

Bog Turtle

An ENSP biologist will ensure that all bog turtle sites are monitored using trained volunteers and accepted protocol. These data will allow biologists to evaluate project success and turtle response to treatment.

**Budget** – *Proposal clearly identifies funds for use on private lands, identifies percentage of non-federal cost match, and identifies past funding awards.*

**New Jersey will use \$849,510 or 100% of Tier-2 funding for use on private land projects.** No Tier 2 funding will be used for staff and related administrative support including biological and compliance monitoring.

New Jersey is committed to reaching a non-federal cost share of a minimum of 26%. This match level is consistent with our two previous years of funding projects.

While we recognize the benefit of obtaining a higher level of non-Federal match, the downside to awarding points to landowners providing more match is the potential of creating a bidding war between applicants as occurred in NJ’s Farmland Preservation Program within some counties. Moreover, the competition of providing a greater match may adversely impact lower income applicants because they cannot afford the decrease payment. The LIP Technical Advisory Committee will continue and review and discuss this issue.

Budget

**LIP Budget FY07 (federal year)**

	Federal Dollars Requested	Non-federal Match (26%)	Total Project Cost
<b>TOTAL LIP Requested</b>	<b>\$ 849,510.00</b>	<b>\$ 298,476.00</b>	<b>\$ 1,147,986.00</b>

Appendix 1

**New Jersey State and Federal Listed Endangered, Threatened and Special Concern Bird Species.**

Species relying on grassland habitats are highlighted.

<b>Birds</b>	
<b>Federal T or E</b>	<b>Special Concern</b>
BALD EAGLE	AMERICAN KESTREL
PIPING PLOVER	BARN OWL
ROSEATE TERN	BLACK TERN
	BLACK-THROATED GREEN WARBLER
<b>State Endangered</b>	BLUE-HEADED VIREO
AMERICAN BITTERN	BROAD-WINGED HAWK
BLACK SKIMMER	CANADA WARBLER
HENSLOW'S SPARROW	CASPIAN TERN
LEAST TERN	CERULEAN WARBLER
MIGRANT LOGGERHEAD SHRIKE	CLIFF SWALLOW
NORTHERN GOSHAWK	COMMON NIGHTHAWK
NORTHERN HARRIER	COMMON TERN
PEREGRINE FALCON	EASTERN MEADOWLARK
PIED-BILLED GREBE	GOLDEN-WINGED WARBLER
RED-SHOULDERED HAWK	GRAY-CHEEKED THRUSH
SEDGE WREN	GREAT BLUE HERON
SHORT-EARED OWL	HORNED LARK
UPLAND SANDPIPER	KENTUCKY WARBLER
VESPER SPARROW	KING RAIL
	LEAST BITTERN
<b>State Threatened</b>	LEAST FLYCATCHER
BARRED OWL	LITTLE BLUE HERON
BLACK RAIL	NORTHERN PARULA
BLACK-CROWNED NIGHT-HERON	SANDERLING
BOBOLINK	SHARP-SHINNED HAWK
COOPER'S HAWK	SPOTTED SANDPIPER
GRASSHOPPER SPARROW	TRICOLORED HERON
LONG-EARED OWL	VEERY
OSPREY	WHIMBREL
RED KNOT	WINTER WREN
RED-HEADED WOODPECKER	YELLOW-BREASTED CHAT
SAVANNAH SPARROW	
YELLOW-CROWNED NIGHT-HERON	

Appendix 2

**New Jersey State and Federal Listed Endangered, Threatened and Special Concern Invertebrate Species.**

Species relying on grassland habitats are highlighted.

<b>Invertebrates</b>
<b>Federal Tier E</b>
AMERICAN BURYING BEETLE
MITCHELL'S SATYR
NORTHEASTERN BEACH TIGER BEETLE
<b>State Endangered</b>
APPALACHIAN GRIZZLED SKIPPER
AROGOS SKIPPER
BRONZE COPPER
<b>State Threatened</b>
A SILVER-BORDERED FRITILLARY
CHECKERED WHITE
FROSTED ELFIN
<b>Special Concern</b>
DOTTED SKIPPER
GEORGIA SATYR
HARISS CHECKERSPOT
HESSEL'S HAIRSTREAK
HOARY ELFIN
NORTHERN METALMARK
TWO-SPOTTED SKIPPER

# NEW JERSEY RANKING CRITERIA FORM (07/08)

## LANDOWNER INCENTIVE PROGRAM

Applicant: \_\_\_\_\_ Region/County: \_\_\_\_\_

Date Received: \_\_\_\_\_ Date Reviewed: \_\_\_\_\_

**Project Significance**

Enter Points in yellow column.








- |    |   |    |  |
|----|---|----|--|
| 1) | Does the project site occur in a Landscape Project Ranking of 5, 4, 3, 2 or 1?<br>Or does it benefit a federally listed or candidate plant species  | 0  |  |
|    | Actual ranking of patch within Landscape project  |    |  |
|    | or 5 if federally listed plant species  |    |  |
|    | Rank of 0 in Landscape Project  | 0  |  |
| 2) | Individual or population of federal T&E species documented on site  | 10 |  |
|    | <b>OR</b>   |    |  |
|    | Is contiguous grassland over 50 acres   | 10 |  |
|    | <b>OR</b>   |    |  |
|    | Is within Cape May Peninsula  | 10 |  |
| 3) | Project is found in area identified as a NJ HIT Focal Area, or priority within the DEP's Wildlife Action Plan   | 10 |  |
| 4) | If grassland project, actual value of area in NJ HIT (1 through 4)  | 4  |  |
| 5) | Project area is part of or within permanently protected boundaries including preserved farmland, non-profit preserves, or land with conservation easement   | 8  |  |
|    | <b>OR</b>   |    |  |
|    | Immediately adjacent to a state WMA, National Park, Forest, Wildlife Refuge or local county or non-governmental permanently protected open space, including farmland preserved properties or property with a conservation easement, that provides quality wildlife habitat for species planned for. | 6  |  |
| 6) | Is a grassland project greater than 10 acres  |    |  |
|    | Grassland project area is 10 - 30 acres   | 5  |  |
|    | Grassland project area is 30+ acres (benefits area sensitive species)   | 10 |  |

**Benefits to Threatened and Endangered Species\*\***

- |    |  |   |  |
|----|--|---|--|
| 6) | LIP plan implementation benefits a federal or state T&E species  | 6 |  |
|    | <b>OR</b>  |   |  |
|    | LIP plan benefits a state species of special concern   | 5 |  |
| 7) | LIP project will benefit multiple listed species   | 5 |  |
|    | Site provides access to habitats and resources needed for lifecycle completion and increases the ability of the individual/population to respond to environmental change through dispersal, migration, or re-colonization - connectivity |   |  |
| 8) |  |   |  |
|    | Very Good  | 8 |  |
|    | Good   | 6 |  |
|    | Fair   | 5 |  |
|    | Poor   | 0 |  |

\*\* Proposed action must not have an adverse or negative impact on existing T&E species found on property

**Likelihood of Success**

9) Applicant can demonstrate site is currently, actively managed for wildlife habitat	3	
10) Applicant is not a non-profit conservation organization	3	
11) Likelihood that project will show measurable results within management commitment timeframe		
High	8	
Medium	6	
Low	2	
12) Applicant is owner and producer/operator	5	
<b>OR</b>		
Landowner and tenant have signed agreement for cooperation	5	

**Total:**  **0**  
Total Possible 85  
Percent 0

Number of acres protected: \_\_\_\_\_

Estimated Cost of project: \_\_\_\_\_

Recommendation of biologist based on site visit: \_\_\_\_\_

\_\_\_\_\_  
Site Visit Date: \_\_\_\_\_ Biologist Name: \_\_\_\_\_

Recommendation of Committee: \_\_\_\_\_

## Appendix 4

### NJ TIER 2 LIP: Justification for Grassland Rental Rate

New Jersey Endangered and Non-game Species Program (NJ ENSP) has established a rental rate of \$150/acre for all grassland habitat that is enrolled in LIP statewide. NJ ENSP determined this rate by evaluating the highest and best agricultural use of these properties. This use was determined to be corn production. The average selling price for a bushel of corn in New Jersey over the past 6 year period was determined. Then, the average bushels of corn produced per acre was assessed.

The expenses associated with planting and maintaining a corn crop on a per acre basis was subtracted from the selling price to determine a fair rental rate for agricultural properties that agreed to establish and maintain grasslands adequate for grassland-nesting birds, rather than plant corn, or other crops. The following calculations document the \$150/acre rental rate:

#### Selling price of corn:

bushel price	\$2.36
bushels/acre	x 130
Corn income/acre	<u>\$306.08</u>

#### Expenses for corn production:

Seed/acre	\$30.00
Manure Fertilizer/acre	\$50.00
Herbicide Spray/acre	\$30.00
Planting Costs/acre	<u>\$40.00</u>
	\$150.00

#### Rental rate for corn:

income/acre	\$306.80
Expenses/acre	<u>(\$150.00)</u>
Profit/acre	\$156.80

**Fair rental rate for agricultural land taken out of production and left in grassland/natural state = approximately \$150/acre**

## **New Jersey's Landowner Incentive Program**

### **Delayed Mowing Rental Agreement**

**Grantee:** Rich McGinn  
Address  
FSA Tract #(if known)  
Phone Number:

#### **Description of the Property:**

This scenic and historic farm – is managed for both hay and annually-tilled crops. The property helps connect other LIP grassland patches in the larger agricultural context and thus contributes to a growing core habitat for area-sensitive grassland birds. This project will create additional grassland, including 50 acres native warm-season grass, and requires that mowing occur only between July 16<sup>th</sup> and April 1<sup>st</sup> each year over the 5-year contract period on the 175 enrolled grassland acres. This delayed mowing regimen will minimize mechanical disturbance to ground-nesting grassland birds such as bobolink, Eastern meadowlark, American kestrel, grasshopper sparrow, and others that could potentially inhabit the site.

#### **Management Requirements:**

In addition to the delayed mowing requirement, a minimum of 20% (35 acres) of the 175 (total acreage) of enrolled grassland acres will remain un-cut each year to provide food and cover for over-wintering birds and other wildlife. The grantee is responsible for ensuring weeds are managed and that the grassland remains suitable grassland habitat for the grant period. A minimum mowing regime of ½ of enrolled acreage mowed annually is encouraged – mowing 80% every other year is also acceptable. Additionally, DFW encourages landowners to bale cut grass. The grantee also agrees to allow biologists from the State or its partners (such as New Jersey Audubon Society) to access the property between May 1<sup>st</sup> and August 15<sup>th</sup> each year to conduct bird point counts to evaluate grassland bird usage. Habitat assessment will also be conducted within that time period.

#### **LIP Rental Agreement Budget:**

\$150/acre rental rate x 175 acres/year x 5 years = \$131,250

GRANTEE accepts a reduced rental payment to meet match as required by the federal grant. The following is an annual breakdown of payment received and match provided.

Grantee will receive \$110/acre rental rate per year from state = \$19,250  
Grantee provides \$40/acre rental payment as match (in-kind) = \$ 7,000



**Grasslands Bird Survey Methodology**

Introduction

Protocol for surveying breeding birds is extremely variable. It is critical to select a methodology that is scientifically-based, standardized and repeatable. Surveys require the observers to be proficient in the visual and vocal identification of grassland-dependent species.

Basic Survey Protocol

Survey dates: May 1 – August 15

Time of day to conduct surveys: 5:30 am – 9:00 am

Number of minutes at each point:	5	Separated into 3- and 2-minutes
Bird surveys	2	One each, May 15-31, June 1-15

Minimum number of points surveyed in one day: 1 Route/Site

Scouting

Prior to the start date, every point in each route needs to be scouted to determine suitability and accessibility. This initial visit must take place before May 15<sup>th</sup>.

If a point is inaccessible or unsuitable, the point may be moved to suitable habitat at a nearby location. To move a point, choose a location with suitable habitat on your route map (grasslands are white on topo maps) that is at least 0.5 mile (straight distance) from any other point. Suitable habitat is an open area (no trees or shrubs), greater than 5 hectares (12.5 acres) and dominated by grasses and forbs. When you find the new point location, draw an arrow on the route map from the old point location to the new one and indicate why it was moved (developed, inaccessible, etc). If there are no other suitable locations that meet the criteria to move a point, then mark it on the map with an X and indicate why it was not surveyed (developed, inaccessible, etc.). Map the vegetation and habitat around the point using a blank map circle (Appendix 3).

Bird Surveys

Surveys are not conducted during rain or during high winds (greater than 12-15 mph, which is enough to constantly move leaves or twigs and to extend a light flag.) Every point in a route must be surveyed on the same day. Surveys will take place a half hour before to three hours after sunrise (approximately between 5:30 am and 9:00 am), two times during the breeding season, preferably from May 15-31, and June 1-15. Surveys need to take place at least 7 days apart. For example, do not conduct one of your surveys on May 31<sup>st</sup> and the other one on June 4.

During the survey the observer stands at the point for 5 minutes and records on the data sheets all grassland bird species seen or heard. This 5-minute period is divided into a 3-minute and a 2-minute segment. The observer records the number of birds seen

during the first 3 minutes separately from those seen during the next 2 minutes. Record all birds as less than 25 meters, 25-100 meters or more than 100 meters away from the survey point on the data sheet. Plot all individuals of target species observed at less than 100 meters on the circle map with the abbreviation of the common. **Do not count longer than five minutes.** Do not exceed 5 minutes because you are sure a certain "good bird" is there and not calling -- it will probably be recorded some other year, and valid negative data are as important as positive data in this survey. Species recorded that are not found on the form should be added at the bottom. **If you observe a target species before or after the 5-minute survey, write it down in the margin or blank spaces on the bottom of the datasheet with a "before" or "after" next to it.**

One and only one observer should count. Counting should be done from outside the car from a stationary point. Absolutely no method of coaxing birds should be used during the 5-minute counting period. This means no "spishing" or tape playbacks or any other method of enticing a bird to sing or call. It is crucial that all surveys be done consistently. Target birds observed between stops should not be counted, but may be noted in the margin of the route map with a line indicating the location of the species. Such birds are of interest, but do not spend extra time pursuing them, as it is important to finish within the time limit; bird activity changes drastically after this time.

Be sure you record the route/site number, point number, observer, recorder (if applicable), date, start time and weather conditions on every datasheet.

Each survey will be undertaken singly or by two people. We prefer single observers because we do not want the observer's ability to concentrate on the birds to be comprised by the presence of another person. However, if you want to undertake the surveys with your birding buddy, please take all precautions to avoid being distracted. We recommend having one observer consistently count birds, while the other records the data. If there are two observers, the counter says what she/he sees or hears to the observer in a quiet voice and the recorder repeats back what she/he heard as she/he records. Only the birds seen and heard by the one observer get recorded on the forms. *If the recorder (2<sup>nd</sup> observer) sees or hears a target species before or after the 5-minute survey, write it down in the margin or blank spaces on the bottom of the datasheet with a statement that this a 2<sup>nd</sup> observer account.*

**The same bird seen/heard in the 3-minute portion of the survey, then seen/heard again in the 2-minute portion should only be recorded in the 3-minute period as this is a single individual. If you are sure that a bird observed in the 3-minute period is different from one observed in the 2-minute period, by all means record it in both sections of the data sheet. Noting on the data sheet that you were sure two different birds were observed will help with our data entry.**

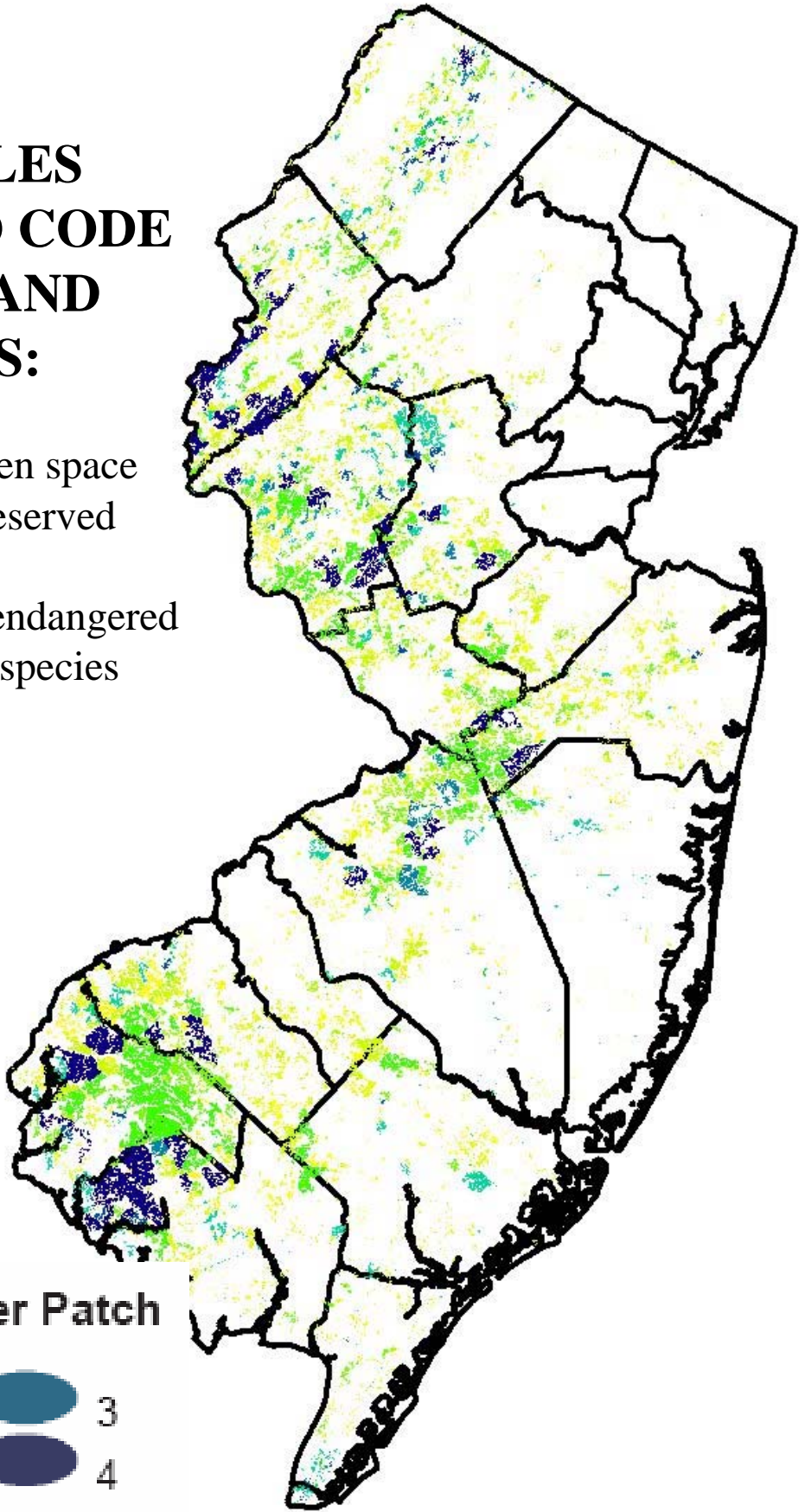
In all situations, avoid biasing the data by disturbing the birds. Walk out of your car quietly, avoid unnecessary movements, and try to blend in as much as possible.

Figure 1.

## Potential Grassland Focal Areas for NJ

### VARIABLES USED TO CODE GRASSLAND PATCHES:

- 500+ acres
- 1/4 mile to open space
- 1/2 mile to preserved farmland
- valued by a endangered or threatened species



### Variables per Patch



**APPLICATION FOR  
FEDERAL ASSISTANCE**

Version 7/03

<b>1. TYPE OF SUBMISSION:</b> Application <input type="checkbox"/> Construction <input checked="" type="checkbox"/> Non-Construction		<b>2. DATE SUBMITTED</b>	Applicant Identifier
Pre-application <input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction		<b>3. DATE RECEIVED BY STATE</b>	State Application Identifier
		<b>4. DATE RECEIVED BY FEDERAL AGENCY</b>	Federal Identifier

**5. APPLICANT INFORMATION**

Legal Name: NJ Division of Fish and Wildlife		<b>Organizational Unit:</b>	
Organizational DUNS: 13-740-4005		Department: Endangered & Nongame Species Program	
Address: Street: PO Box 400		Division:	
City: Trenton		Name and telephone number of person to be contacted on matters involving this application (give area code)	
County: Mercer		Prefix: Mrs	First Name: Paulette
State: NJ		Middle Name S.	
Zip Code: 08625-0400	Last Name Nelson		
Country: USA		Suffix:	
		Email: paulette.nelson@dep.state.nj.us	

<b>6. EMPLOYER IDENTIFICATION NUMBER (EIN):</b> 21-6000928	Phone Number (give area code) (609) 984-0839	Fax Number (give area code) (609) 984-1414
---	---	---

<b>8. TYPE OF APPLICATION:</b> <input type="checkbox"/> New <input checked="" type="checkbox"/> Continuation <input type="checkbox"/> Revision If Revision, enter appropriate letter(s) in box(es) (See back of form for description of letters.) Other (specify)	<b>7. TYPE OF APPLICANT:</b> (See back of form for Application Types) A. State Other (specify)
---	--

<b>10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER:</b> 15-633	<b>9. NAME OF FEDERAL AGENCY:</b> U.S. Department of Interior, Fish and Wildlife Service
---	---

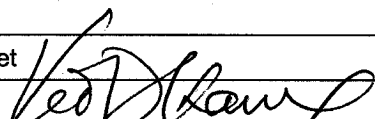
TITLE (Name of Program): Landowner Incentive Program	<b>11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:</b> Tier 2 SFY2008 Landowner Incentive Program
--	--

<b>12. AREAS AFFECTED BY PROJECT (Cities, Counties, States, etc.):</b> Statewide	<b>14. CONGRESSIONAL DISTRICTS OF:</b> a. Applicant b. Project
---	--

<b>13. PROPOSED PROJECT</b> Start Date: 03/01/2008 Ending Date: 02/28/2018	<b>16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?</b> a. Yes. <input type="checkbox"/> THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON DATE: b. No. <input type="checkbox"/> PROGRAM IS NOT COVERED BY E. O. 12372 <input checked="" type="checkbox"/> OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW
--	---

<b>15. ESTIMATED FUNDING:</b>	<b>17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?</b> <input type="checkbox"/> Yes If "Yes" attach an explanation. <input checked="" type="checkbox"/> No
a. Federal \$ 849,510.00	
b. Applicant \$	
c. State \$	
d. Local \$	
e. Other \$ 298,476.00	
f. Program Income \$	
g. TOTAL \$ 1,147,986.00	

**18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT. THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.**

<b>a. Authorized Representative</b>			
Prefix Mr.	First Name Ved	Middle Name P.	
Last Name Chaudhary		Suffix	
b. Title Asst. Commissioner, Mgt & Budget		c. Telephone Number (give area code) (609) 292-2916	
d. Signature of Authorized Representative 		e. Date Signed 5/15/07	

# Landowner Incentive Program (LIP) National Review Team Ranking Criteria Guidance for Tier-2 Grant Proposals

State: New Jersey

1. **OVERALL**—Proposal provides clear and sufficient detail to describe the State’s use of awarded funds from the LIP, and the State’s program has a high likelihood for success. (6 points total)
  - a. Proposal is easy to understand and contains discrete sections as described in 522 FW 1.3C: Need; Objective; Expected Results and Benefits; Approach; and Budget. **Pages listed below.**
  - b. Proposal, taken as a whole, demonstrates that the State can implement a Landowner Incentive Program that has a high likelihood for success in conserving at-risk species on private lands (for example, agency support for program, dedicated staff in place to implement program, priorities clearly identified, processes in place to implement program, past successes, etc.). **Pages listed below.**
  
2. **NEED**—The NEEDS section describes the urgency for implementing a LIP. States should describe how their LIP is a part of a broader scale conservation effort at the State or regional level. (5 points total)
  - a. Proposal clearly describes the urgency of need for a LIP to benefit at-risk species in the State. **Pages 4-7**
  - b. Proposal clearly describes conservation needs for targeted at-risk species that relate directly to objectives and conservation actions described in other sections of the proposal. **Pages 4-7**
  
3. **OBJECTIVES**—The OBJECTIVES section provides clear objectives that specify fully what on-the-ground activities or other results related activities are to be accomplished. (6 points total)
  - a. The objectives of the proposal describe discrete obtainable and quantifiable outputs to be accomplished for the target at-risk species (for example, the proposal identifies the number of acres of wetlands or other types of habitat, the number of stream miles to be restored, the number of landowners served, the number of management plans developed, etc.) **Pages 8-9**
  - b. The objectives of the proposal describe discrete, obtainable and quantifiable outcomes to be accomplished for the target at-risk species (for example, the proposal identifies the number of at-risk species whose habitat within the State will be improved; the percentage increase in a population(s) of one or more at-risk species on LIP project sites; the increase in number of individuals of one or more at-risk species on LIP project sites, etc). **Pages 8-9**

- 4. EXPECTED RESULTS AND BENEFITS**—The EXPECTED RESULTS AND BENEFITS section clearly describes how the activities will benefit targeted at-risk species. (17 points total)
- a. Proposal describes by name the species-at-risk to benefit from the proposal. **Pages 8-12**
  - b. Proposal identifies the specific habitat type of the targeted at-risk species that will benefit from the proposed activities. **Pages 8-12**
  - c. Proposal makes clear connections between the conservation actions proposed and expected benefits for species and habitats (i.e., describes how conservation actions will result in benefits). **Pages 8-12**
  - d. Proposal describes the short-term benefits for at-risk species to be achieved within a 10-year period. **Pages 9-12**
  - e. Proposal describes the long-term benefits for at-risk species to be achieved beyond 10 years. **Pages 9-12**
  - f. Proposal identifies discrete conservation outcomes that will likely prevent the imminent extinction of one or more species.
- 5. APPROACH**— The APPROACH section clearly describes how program objectives, contractual and fiscal management, and fund distribution will be accomplished and monitored. (24 points total)

**Program Implementation** (5 points total)

- a. Proposal describes the conservation priorities for the State’s LIP and describes how these priorities address portions of conservation plans at a local, state, regional, or national scale, including the State’s Comprehensive Wildlife Conservation Strategy. **Pages 12-14**
- b. Proposal describes the specific types of conservation projects and/or activities to be undertaken to address these priorities and provides adequate detail to understand how these projects and/or activities will be implemented (which practices will be used, who will implement the practices, when the practices will be implemented, methodology for establishing cost shares for practices, etc.). **Pages 12-14**

**Fiscal Administrative Procedures**—Proposal describes adequate management systems for fiscal and contractual accountability. (2 points total)

- c. Processes to ensure contractual and fiscal accountability between the State and private participating landowners (i.e., contract or memorandum of agreement). **Pages 16-17**
- d. Proposal indicates that the State has an approved legal instrument to enter into agreements with landowners. **Page 16**

**System for Fund Distribution**—Proposal describes the State’s fair and equitable system for fund distribution. (6 points total)

- e. Proposal describes State’s selection or ranking criteria and process to select projects (include copies of any relevant ranking or selection forms). **Pages 15-16**

- f. State's ranking or selection criteria are adequate to select projects based on conservation priorities identified in the proposal. **Appendix 3**
- g. Project proposals will be (or were) subject to an objective selection procedure (for example, internal ranking panel, diverse ranking panel comprising external agency members and/or members of the public, computerized ranking model, or other non-ranking selection process). **Pages 15-16**

**Monitoring**—The MONITORING section describes State's compliance and biological monitoring plan for LIP including annual monitoring and evaluation of progress toward desired program objectives, results, and benefits. (6 points total)

- h. Proposal describes *compliance monitoring* that will ensure accurate and timely evaluation to determine if landowners have completed and are maintaining agreed-upon practices in accordance with landowner agreement, including the process for addressing landowners who fail to comply with agreements. **Page 17**
- i. Proposal describes *biological monitoring* that will ensure species and habitats are monitored and evaluated adequately to determine the effectiveness of LIP-sponsored activities and progress towards accomplishment of short- and long-term benefits (Monitoring items may entail approaches for developing monitoring protocols and establishing baselines, monitoring standards, timeframes for conducting monitoring activities, and expectations for monitoring.) **Pages 17-18**

**6. BUDGET**—The BUDGET section clearly identifies funds for use on private lands, identifies percentage of non-federal cost match, and identifies all previous LIP Tier 1 and Tier 2 funding awards. (6 points total)

- a. Proposal describes the percentage of the State's total LIP Tier-2 program funds identified for use on private lands as opposed to staff and related administrative support. **Page 18**

*Use on private lands* includes all costs directly related to implementing on-the-ground projects with LIP funds. Activities considered project use include: technical guidance to landowner applicants; habitat restoration, enhancement, or management; purchase of conservation easements (including costs for appraisals, land survey, legal review, etc.); biological monitoring of Tier 2 project sites; compliance monitoring of Tier 2 projects. Staffing costs should only be included in this category when the staff-time will directly relate to implementation of a Tier 2 project. Standard Indirect rates negotiated between the State and Federal Government should also be included under Project Use. *Staff and related administrative support* includes all costs related to administration of LIP. Activities considered administrative include outreach (presentations, development or printing of brochures, etc.); planning; research; administrative staff support; staff supervision; overhead charged by subgrantees unless the rate is an approved negotiated rate for Federal grants.

- b. The Budget section and the Application for Federal Assistance (SF-424)

identify the percentage of nonfederal cost sharing. **Page 18**  
(Note: I.T. = Insular Territories)

- c. Proposal identifies percentage of previously awarded funds (excluding 2006 fiscal year's awarded funds) that have been expended or encumbered. (Expended or encumbered funds are those Tier 2 funds that a State has either spent or has dedicated to a landowner through a signed contract between the landowner and the State. Funds must be expended/encumbered on or before the due date for submittal of the Tier 2 grant proposal to the USFWS) **Page 7**