

**Highlands Coalition Comments on the NJ State Wildlife Action Plan:
(Submitted to the DEP Division of Fish & Wildlife Jan 19th, 2018)**

NB: To conform to the process for submitting comments on the webpage, comments need to address specific sections of the WAP.

Sections for comment:

Introduction

- General comment on the whole 2017 NJ WAP

Determining Species of Greatest Conservation Need

- Evaluation of risk to different species
- Selection criteria for “at risk” species – use of SGCN as starting point

Selecting Focal Species

- Process to filter SGCN for tiers of risk – “Priority SGCN”, “Upper tier SGCN”, and “Focal Species”

Assessing the Threats to New Jersey's Focal Species and Their Habitats

- Habitat threats are identified as a regional concern, therefore a “common lexicon” of threats needs to be implemented and New Jersey and the whole Northeast USA

Habitats for Wildlife of Conservation Need - Identifying Conservation Focal Areas

- Mapping at risk species and identifying “conservation focal areas”

Action Development Meetings

- Updates existing identified threats to include new risks ie. climate change, emerging diseases etc.
- Workshop process to inform revisions to the NJ WAP

Defining Conservation Actions

- Common lexicon for action
- Action for “focal species” + “SGCN”

Monitoring the Results of Conservation Actions

- Coordination of State and Regional monitoring

The State Wildlife Action Plan Revision Process

- The revision process is ongoing with different stakeholder participation
-> **Any specific comment referring to the appendices**

1. Introduction

General Comments about the Wildlife Action Plan 2017

There need to be protections in place that protect our New Jersey lands that are deemed *Natural Heritage Priority Sites and Priority Preservation Sites*. This WAP plan fails to acknowledge that except for extreme and unforeseen circumstances, a significant quantity of certain lands should be set aside for “preservation” and not proposed for “active management”. The Office of Natural Lands Management and the Natural Heritage Program should be the primary decision makers regarding management proposals on these sensitive lands. This “lack of respect” for certain aspects of New Jersey’s Natural Heritage, particularly rare plants and sensitive forest-interior raptors as well as other forest interior animals, has become apparent in the approved plans for both Weldon Brook and Sparta Mountain WMAs, and there is little attempt to resolve this conflict in this Wildlife Action Plan.

Additionally, any future action to enhance species protection in New Jersey must consider damage to every habitat beyond the four listed in the WAP (p. 12 – 75). The plan itself makes explicit the fact that measures to promote species can have severe detrimental affect on fragile habitats.

“The actions, projects, and monitoring programs presented in this plan for wildlife also provide an opportunity to contribute to the conservation of rare plants and natural communities. At the same time, without proper precautions, actions directed at enhancing wildlife, especially on the ground, actions that modify habitats, may pose risks to rare plants.”

(page i, Attachement IV: Guidelines for Integrating Plant Species of Conservation Concern into Wildlife Action Planning and Implementation)

We strongly suggest every *New Jersey Natural Heritage Priority Site* be treated with the same level of attention. Anything short of this is delinquent in its responsibility to the public trust.

Finally, we strongly oppose “management” or “prescriptions” that call for clear cutting/modified seed tree or selective tree/shelterwood treatments, proposed with the purpose of creating habitat for species the Plan considers imperiled, at the expense of protecting our Natural Heritage Priority Sites and Priority Preservation Areas. When our Natural Heritage Priority Sites were acquired, they should have been designated as State Natural Areas, and these conflicts could have been avoided. Land management prescriptions in these sensitive areas should be limited to those actions that preserve their integrity, such as invasive species management, rather than proposals that transform these sensitive areas into entirely different habitat types that are incapable of supporting the rare species that they already house.

2. Determining Species of Greatest Conservation Need (SGCN)

We disagree with the over-simplification that “*Habitat Loss is the Greatest Threat to New Jersey’s Wildlife*” (p. i). The layperson thinks of habitat loss as habitat conversion to non-habitat. To over-simplify and state that habitat loss is the greatest threat to our native animal species conveys the wrong

message, because it leads to a public perception that conserved public lands (even ones that are clearly overridden with deer, invasive species, white-nose fungus, and scores of other problems) are still mitigating against species declines, when they are actually contributing to species declines. Certainly, some state and federally-listed species are dependent upon a critical number of discrete microhabitat locations, especially vernal pool species such as Tiger and Blue-spotted Salamanders, grassland or beach birds that require large patches such as Upland Sandpiper and Piping Plover, and site-specific wetland, beach, or riverine specialists like Bog Turtle, Beach Tiger Beetle, Dwarf Wedge Mussel and others, all of whose locations have dwindled to a precious few because of habitat conversion to development or inappropriate forms of agriculture or recreation.

But the vast majority of New Jersey's rare and declining animal species have broad geographic ranges and significant areas of conserved land that could serve as appropriate habitat. It is the subtle deterioration of this extant habitat due to forest fragmentation, over-abundant deer, invasive plant species, invasive pathogens, air and water pollution, disruptions of normal hydrologic regimes due to both climate change, and water withdrawn from surface aquifers, serious connectivity problems due to highways acting as barriers, unbridled use of pesticides and herbicides that destroy pollinator populations, and many other factors that are causing their decline.

Subtle habitat degradation is a form of habitat loss, because habitats become less capable of supporting healthy populations. But the general public does not realize that subtle degradation is a severe and ongoing problem almost everywhere, all the time, nor do they realize that for many declines, there are no obvious actions. This fact leads to an unfortunate situation where humans can act to ameliorate most species declines, because they hear about our success stories - e.g. black bear, bald eagle, osprey, salamander crossings - but understand very little about the myriad declining rare species about which we can do almost nothing, such as bats, amphibians, and reptiles being destroyed by introduced pathogens, and pollinators being destroyed by chemicals that have yet to be banned, like neonicotinamides. These complex problems should not be over-simplified as "habitat loss." This over-simplification reflects badly on the expertise and ingenuity of the NJ Endangered and Non-Game Species Program.

3. Selecting Focal Species

The determination of the 656 SGCN and 351 Priority SCGN species seems to have been largely objective and based on state and regional data and results of Delphi process state lists. However, the criteria for the selection of "Upper Tier" and finally the 107 "Focal Species" appears to have been highly subjective, and for many birds and a few other taxa driven by the desire to include extra game species and early successional habitat specialists in which the statement "the establishment of young forest" justifies aggressive forestry in virtually every forest type in the state. What is the need to include so many common species as focal species, including some that are not in the least bit rare (e.g. scarlet tanager and blue-winged warbler, both ranked as stable and distributed statewide in NJ)? It seems as though species were cherry-picked by a subjective process to ensure that the creation of young forest and the creation of huge forest gaps via aggressive logging and canopy thinning would be justifiable everywhere, even when other state-listed T&E species that did not make the 107 focal list would be

negatively impacted by such practices. Scarlet tanager and blue-winged warbler, for example, only met one objective criteria (Regional SGCN list). The Taxa Specific Criteria is a subjective category, which appears to have been invented so that common species that support logging initiatives could receive more checkmarks toward making the focal 107 list. It seems blatantly obvious that Scarlet Tanager was added because it is known to “utilize young forest after the nesting period, but there is little evidence that such young forest is required for scarlet tanager as has been shown for golden-winged warbler. When this WAP states that “proper and targeted forest management can be beneficial for this species, this leads land managers to choose to creating young forest in an absence of actual conservation need, which can do damage to species that are rare and present (*see next paragraph), but are not listed on the focal 107 list. These abundant species will not be useful in determining the value of forest manipulations; they are too common to interpret their presence as a response to a habitat treatment. For example, many projects designed to rescue Golden-winged Warbler from the brink of local extinction in NJ have become occupied by Blue-winged warbler, not the target species. Placing blue-winged warbler on this focal 107 list appears to be a blatant attempt to justify failed golden-winged warbler projects, since blue-winged warblers are successfully colonizing every available habitat with an expanding population in NJ. *Regarding the possible rare and present species that may be harmed by young forest creation, examples are the Northern Goshawk, which is among New Jersey’s most endangered species “Due to the increasing threats facing forested habitats and the scarcity of nesting goshawks, the status of the goshawk was reclassified as endangered in 1999.” The New Jersey Natural Heritage Program considers the goshawk to be “apparently secure globally,” yet “critically imperiled in New Jersey because of extreme rarity” (Office of Natural Lands Management 1992). Goshawk is on the State List and the Priority SGCN list, but then is left of the Focal 107 Species list. The same is true of red-shouldered hawk, which will suffer dramatically from logging, as is occurring at Sparta WMA, where young forest is being created within reported nesting territories of Red-Shouldered Hawk, yet ignored and listed as not present in the approved forestry plan, inviting Great Horned owls to move in and devastate the chances for existing Red-shouldered Hawks at Sparta Mountain to achieve nesting success.

4. Assessing the Threats to New Jersey's Focal Species and Their Habitats

Ecosystem-level protection is the best approach to preventing species decline and protecting native diversity, a growing and effective trend in conservation biology. This reality is recognized in many ways throughout the SWAP. On the other hand, many of the Plan’s actions and jobs paradoxically threaten ecological integrity and thus diminish habitat value, not only for less rare species but also for listed SGCN and for other imperiled species not on the SGCN list.

Maturing forests and their wildlife are weakly represented in the Plan. Only a few articulated projects mention forest habitat. Those few are tied to job actions that chiefly aim to cut canopy trees to create younger vegetation. Unfortunately, a philosophy of harvesting swaths of mature forest canopy is already being implemented on New Jersey’s WMA lands. If more young forest or brushy habitat is needed it should not be carved from forested conservation lands. The state’s forests are already highly fragmented, as the SWAP indicates.

We strongly recommend that the Plan be revised to move New Jersey toward much more protection and genuine restoration of natural, biodiverse forested ecosystems.

In Appendix H, threat 5.3.2 (p. 481) “Intentional effects (large scale)” of logging and wood harvesting should include:

- 1.habitat destruction and increased ATV activity due to creation of logging roads, and
- 2.threats to existing and developing old-growth forest.

In Appendix H, threat 5.3.4 (p. 481) “Unintentional effects (large scale)” of logging and wood harvesting should include:

- 1.reduction of soil pH due to increased sunlight,
- 2.soil compaction and rutting,
- 3.changes to hydrology, such as increased runoff, reduced groundwater recharge, and standing water.

While on private lands it may be difficult to inventory the species found on said property, in our state lands, such as Green Acres encumbered lands, accurate inventories should be held to the highest standard, meeting Public Trust expectations; hence, we are recommending baseline studies be conducted with various experts in the field, along with local advocacy groups, like ours, to ensure that management prescriptions do not do more harm than “potential” good. Since, many of the treatment prescriptions describe altering habitat to entertain a specific SGCN, careful monitoring needs to be done before future plans are put in place to cause no harm to already existing species.

5. Habitats for Wildlife of Conservation Need - Identifying Conservation Focal Areas

A great strength of the WAP is its attention to non-game and rare species, not just game wildlife. However, the Plan should go yet farther to ensure that wildlife management projects and jobs don't destroy valuable ecosystem components and processes. Wildlife management projects have potential to cause ecological harm. Although tradeoffs are sometimes appropriate, it is vitally important for the Wildlife Action Plan to mandate careful consideration of the entire ecosystem.

In New Jersey, we should avoid massive transformation of high quality, intact ecosystems, for which this plan should specify protective procedures. The WAP should, but does not, require scrutiny of ecosystems before management actions take place. At present, the draft WAP offers far too many loopholes, with its vast array of possible jobs and actions.

This concern is deepened by the DEP's recent and increasing clearance of forest canopies within mature, high-quality forested ecosystems on state conservation lands. Ecologists have concluded that such severe ecosystem transformation for the Golden Wing Warbler is harmful to many other species, including special concern species, and to the integrity and contiguity of New Jersey's all-too-limited mature forests. This situation illustrates the potential pitfalls of a narrow focus on individual species.

Many components of the Wildlife Action Plan do acknowledge the importance of protecting and preserving entire ecosystems. For example, Attachment 3, “Climate Change Summary for Wildlife

Action,” stresses the value of connectivity, ecological processes, and protection of species-rich ecosystems, sometimes to the detriment of high-risk species (p. 90). Also in the Plan, reliance of some species on undisturbed habitat is clearly and appropriately specified for many conservation target species. For example, for the Allegheny Wood Rat, the plan calls for protection of large contiguous forest tracts, particularly those with large trees (p. 95).

Yet while targeting species of concern, the Plan fails to safeguard other species or the full ecosystem. On page i, the plan states “**Regardless of the property or the owner, this plan is designed to serve as a framework for directing the protection of Species of Greatest Conservation Need and the habitats required for their continued survival**” and yet on our public lands the species that are currently living in those areas need protection from disturbances caused by various “management treatments”, through practices such as modified seed tree/ clear cutting and selective tree harvesting, especially in areas with vernal pools. Our native plants also need protection and it is unclear how our endangered and special concern plant species are being protected in this WAP. Any future action to enhance species protection in New Jersey must consider damage to habitats beyond the four listed in the WAP (p. 12 – 75). The plan itself makes explicit the fact that measures to promote species can have severe detrimental affect on fragile habitats.

“The actions, projects, and monitoring programs presented in this plan for wildlife also provide an opportunity to contribute to the conservation of rare plants and natural communities. At the same time, without proper precautions, actions directed at enhancing wildlife, especially on the ground actions that modify habitats, may pose risks to rare plants.”
(page i, Attachement IV: Guidelines for Integrating Plant Species of Conservation Concern into Wildlife Action Planning and Implementation)

We strongly suggest every New Jersey Natural Heritage Priority Site be treated with the same level of attention. Anything short of this is delinquent in its responsibility to the public trust. We state in the strongest terms that our flora and fauna need equal protections in the state.

Thus, the WAP should establish protective procedures in terrestrial and wetland environments:

- **Require pre-project baseline ecological knowledge.** On-site studies by ecologists should be required to secure specific information about ecological integrity and intactness, vegetation, communities of special concern, forest age and structure, wetland conditions and proximity, and non-target native species including plants, as well as vertebrates. Inaccurate and overly general claims should be recognized as insufficient.
- **Require a thorough assessment of potential impacts,** based on such ecosystem- and landscape-level considerations. The Natural Heritage Program staff and professional ecologists should be deeply involved with analyzing potential harm to New Jersey’s array of natural ecosystems, and their advice heeded.
- **The WAP should explicitly exclude management activities that disrupt** high-quality, intact ecosystems. Clearing of intact native forests should be rare, and Forest Stewardship Plans should be approved only if minimizing ecological damage.

Approvals should depend upon these findings and analysis.

-- **New Comment Under the same Section Heading** --

Reference to **Project 11: Habitat Management to Improve Ecological Diversity:** This important section of the plan combines wise with troubling planning.

Job 7.3: Correctly identifies as a threat to diversity “Removal of coarse woody debris.” With this important concern, any forest stewardship actions must leave on site logs and branches. Timber should never be removed when wildlife habitat and biodiversity are top priorities. **Job 2.10** likewise notes need to allow coarse woody debris for shelter toward managing invasive species

However, other jobs/actions seeking the goal of ecological diversity call for harmful management activities, specifically (again) clearing and opening up the forest canopy.

Job 7.3.4, Lack of natural disturbance patterns or ecosystem functions due to species loss” states that “lack of forest disturbance minimizes the diversity of herbaceous vegetation and other shrubs and trees that need a lot of sunlight to grow.” But natural disturbance from wind and tree death takes place without human intervention, creating sunny openings. The scale and effects are very different from those of logging, which should not occur in the name of biodiversity or wildlife in New Jersey forest types, except for non-native tree species. Also, there are numerous rare, shade-loving, forest-floor herbaceous plants, especially in heavily forested Natural Heritage Priority Sites in the New Jersey Highlands, and other regions, that suffer greatly from competition with common, sun-loving plant species when light gaps are larger than those created by natural treefall gaps and other small-scale disturbances. The over-simplified concept professed by many game species biologists and foresters that some sunlight is good, so overabundant sunlight must be better, is not substantiated by scientific ecological literature.

Job 7.3.5.5: Poor habitat management, and job 7.3.5.17: Decreased diversity in height and species of herbaceous vegetation:” These sections of the Plan likewise question nature’s ability to thrive without intervention, and they villainize a hands-off, natural dynamic that is far better for wildlife habitat, broadly speaking. Structural diversity develops naturally. It is indeed depleted today in many parts of the state, but because of the abundance of deer, not because of shade. This fact is now supported by the recent forest research conducted by Dr. Jay Kelly of Raritan Valley College across dozens, and perhaps over 100, forest sites throughout northern NJ .

The list of focal wildlife species (FSGN) is short on species that decline or disappear with “management’ in the form of forest clearings, especially on the size and scale now underway on New Jersey’s WMAs. It seems the Plan is overly focused on species that can benefit from forest clearings without considering Goshawk and other interior species.

Projects 18 & 19: invasive species control: We vigorously support efforts to control the invasive species threat to natural areas and wildlife habitat. Conservation actions proposed include some very important concepts that we are glad to see emphasized in the WAP. For vegetation and forest management, the Plan asserts the importance of core forest protection (with minimal edge) and coarse woody debris to be kept on site.

However, the following conservation actions for managing vegetation are more likely to increase than control invasive species. These are puzzling indeed. Silvicultural work to open canopies or native understories will absolutely increase biological invasions, whatever other steps are taken. Management to create young forest is by no means justified for invasion control.

On the contrary, maintaining contiguous, unbroken forest is very important to prevent, minimize, and manage invasive plants and thence to improve habitat. The following jobs in Appendix K should be reconsidered in consultation with invasive species experts and should omit plans to remove (whether called management, clearing, or thinning) native forest canopies:

2.11.0.19 “Implement forest management/silviculture strategies that enhance and maintain critical core forests as appropriate for targeted species.” What forest management/silviculture strategies could possibly help control invasive plants? Any clearing, logging or thinning will admit more light and promote invasive species – while harming the canopy.

2.11.0.45 “Manage forests to increase variation in age structure and composition using BMPs that promote and maintain functioning ecological forest-based systems and biological diversity.” This does not make sense as an action to manage vegetation for invasion control.

2.11.0.45 “Regularly and/or rotationally create young forest habitat in targeted areas to maintain and regenerate a mosaic of upland forest habitats that will benefit shrub-and young forest-dependent species.” Such management will accelerate biological invasions in northern New Jersey forests.

2.1: “Restore and/or enhance understory habitats that suppress invasive species and provide critical resources and enhance sheltering, foraging, and nesting cover.” Unclear. Would this be done by planting understory vegetation and protecting it from deer? That could work. It sounds like canopy clearing might again be planned. This would admit more invasive growth. It’s New Jersey and we’re surrounded by invasive plants.

6. Action Development Meetings

Climate Change Impacts: Climate change is considered by the Plan for sea level rise with several marine and coastal initiatives, but not for forests and other inland habitats.

We also need action to protect and secure terrestrial wildlife and vegetation. Much scientific research documents a heavy footprint of climate change for biodiversity, with shifting and shrinking habitat and species ranges, because of warmer, dryer, and less predictable climate conditions.

The best defense is large intact natural areas to hold sizable populations and contiguity for migration corridors. So this should also be part of New Jersey’s wildlife protection planning.

The SWAP should incorporate goals of forest protection and articulate such goals. Instead, today’s trend toward forest clearing on state WMAs accelerates such damage, creating open dryer and warmer habitats inhospitable to existing forest species. Management by timber harvesting also fragments and creates edge effects, impeding resilience and the land’s capacity to maintain viable populations of animals and plants.

7. Defining Conservation Actions

In Appendix K, we enthusiastically support Job 11.05 Landscape Level Forest Management Planning. Note that this project should get priority so that it can inform other projects, such as 10.02, 10.03, 11.02, 11.03, and 22.02.

We also enthusiastically support Job 22.03 Protecting Priority Wetlands. We would like to see similar jobs for protection of vernal pools (perhaps by extending job 22.03), facilitating the development of old growth forests, and preventing fragmentation.

We are disappointed that the jobs focused on scrub-shrub and young forest habitat creation are not mirrored by jobs focused on development of old-growth forest, as both are needed for balanced forest age structure. There are 12 actions associated with supporting old-growth forest, but there are no jobs focused on old-growth forest. (Similarly, 6 threats mention early successional, but none mention old-growth or even mature forest, even though old-growth forests are obviously threatened.) The only jobs supporting old-growth forest are very broad.

-- New Comment Under the same Section Heading --

For comment on the following, see below:

- Scrub-shrub and young forest focused jobs:
 - 10.03 Scrub-shrub and Young Forest Habitat Management (Best Management Practices project)
 - 11.02 Scrub-shrub Habitat Management (Habitat Management to Improve Ecological Diversity project)
 - 11.03 Scrub-shrub and Young Forest Habitat Management - Outreach and Education

- All old-growth related jobs:
 - 3.01 It All Adds Up: Local Actions + Regional Awareness = Regional Habitat Solutions!
 - 11.06 Forest Management in Southern New Jersey
 - 13.01 Improving Biodiversity on Military Lands
 - 21.01 Assessing the Full Value of Managing Private Lands for Wildlife
 - 25.01 Ecosystem Management for Fisheries Management (which references 6 old-growth actions)

- Jobs potentially benefiting both:
 - 10.02 Forest Health
 - 22.02 Forest Stewardship Program

Comment:

We would like to see old-growth, forest-focused jobs for best-management practices, habitat management for ecological diversity, and outreach and education. We would also like assurance that management for forest health, structure, ecological and age-class diversity supports both old-growth and young forest. And to be clear, forestry projects designed to create “old-growth characteristics” do

not replace the need for substantial old-growth forests and natural areas. Forests that are periodically manipulated but possess only two simplistic old-growth characteristics (uneven age of trees and some coarse woody debris on the forest floor) are not old growth forests, do not provide the same microhabitats and structure as old growth forest. Unfortunately, this terminology is designed as a smoke-screen to confuse the general public into thinking that actual old-growth is being considered, when in fact these forests are intended to be harvested frequently.

8. Monitoring the Results of Conservation Actions

The number of monitoring programs is impressive. In addition to monitoring data already being collected and utilized for wildlife and plant species, projects in the Skylands Region should take advantage of data from, and request relevant data collection by, the following programs to protect the region's headwaters, C1 streams, vernal pools, wetlands, and other critical habitats:

1. Rivers and Streams Chemical/Physical Monitoring
2. Ambient Surface Water Quality Monitoring Network
3. Landscape Project Critical Habitat Mapping
4. Monitoring Avian Productivity and Survivorship Program
5. North American Amphibian Monitoring Program
6. AMNET Macroinvertebrate Monitoring

Regarding Monitoring Scenario 2, for Scrub-shrub & Young Forest Habitat Management (p. 129), which proposes forest thinning for early successional forest creation: under the ecosystem-level ideology proposed in the NHP paper (Appendix IV, Part 1), the proposed monitoring is woefully inadequate. For example, the impact of the edge effect into adjacent forest should be monitored. Soil, water, and rare plants should be monitored as well. This is especially important given that the proposed treatment is essentially a clear-cut, with as little as 10% of the canopy remaining. Furthermore, the proposal to use forest thinning of mature forests to create a mosaic of early successional forest (which appears to be the one "restoration action" that ENSP is proposing) probably relies on mature forests due to anticipated logging and funding considerations, and also on the assumption that forest fires would naturally have created more early successional forest (which is erroneous for the Skylands). However, this approach would require the creation of logging roads throughout the forest to access the mosaic, and would result in rotational logging throughout the forest rather than the re-logging of the initial mosaic. The result is extensive disturbance and the creation of a network of logging roads throughout the loggable forest area. The objective should be extended to include minimizing the negative impacts on the existing mature forest, thereby driving the associated additional monitoring and motivating the examination of alternative actions for achieving this objective.

9. The State Wildlife Action Plan Revision Process

In reviewing the **Action Development Workshops and Invitees & Attendance**

Via Appendix L, the New Jersey Highlands Coalition would like to mention that other nonprofit conservation groups like NJ Sierra Club, or FOSM/NJ Forest Watch were not included nor invited. Those that were invited represent primarily the southern part of the state, and hence are not representing the full balanced needs of the state. It appears as though the northern part of the state was not fully represented.

Additionally, under “Local, State or Federal Government”, again here are very few local governments from the northern part of the state, such as in the Highlands or Skylands Region. Also, it is curious to note that six businesses were invited and five attended. With reference to “**Academia**” invited, again the authors of the plan chose to focus on the southern part of the state. Under this category, other academic institutions with environmental science programs also should have been invited, such as Drew University, Montclair State University, Kean University, Ramapo College of New Jersey, and William Paterson University (to provide just a few examples,) to provide a broader perspective on a wildlife needs assessment in the state.

Further, there is mention that the “**plan fosters cooperation between partners in the public and private sectors**” on page i. and yet makes no mention of the public sector that was invited. The reader is then left to conclude that the plan did not consider the public when formulating this plan.