

Pennsylvania Field Office  
315 South Allen Street, Suite 322  
State College, Pennsylvania 16801-4850

February 11, 2005

Mr. John Schultz, District Ranger  
Allegheny National Forest  
Bradford Ranger District  
29 Forest Service Drive  
Bradford, PA 16701

RE: USFWS Project #2005-0480

Dear Mr. Schultz:

This responds to your letter of October 22, 2004, requesting Fish and Wildlife Service review of the Martin Run Biological Assessment (BA). The following comments are provided pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to ensure the protection of endangered and threatened species.

On June 1, 1999, the Fish and Wildlife Service issued a biological opinion (BO) regarding the impacts of forest management and other activities that would be implemented under the 1986 Land and Resource Management Plan (Forest Plan) for the Allegheny National Forest (ANF). The Service's programmatic BO evaluated the effects of Forest Service management program activities, including timber management, on the bald eagle (*Haliaeetus leucocephalus*), Indiana bat (*Myotis sodalis*), clubshell mussel (*Pleurobema clava*), and northern riffleshell mussel (*Epioblasma torulosa rangiana*).

In the programmatic biological opinion, we determined that implementation of projects predicated upon the Forest Plan is not likely to jeopardize the continued existence of the bald eagle, Indiana bat, or clubshell mussel. We also determined that implementation of the Forest Plan and most projects predicated upon it (with the exception of boating facility operation) are not likely to jeopardize the continued existence of the northern riffleshell. A jeopardy determination was made for the operation of boating facilities with respect to the northern riffleshell mussel, and reasonable and prudent alternatives were identified to avoid jeopardy to this species.

Although the Service has provided a programmatic biological opinion to the Forest Service for the ANF Forest Plan, the Service will review, as they are developed, site-specific projects that the Forest Service determines "may affect" federally listed species. The Service will determine if any effects will occur as a result of a site-specific project in a manner, or to an extent, not evaluated or previously disclosed and discussed in the Service's programmatic BO. We consider this site-specific project analysis to be "Tier 2" of the consultation process, with the

programmatic consultation (and resulting BO) constituting the “Tier 1” consultation. Our project-specific (Tier 2) consultations will focus on: 1) compliance with the reasonable and prudent measures and associated terms and conditions in the programmatic BO; 2) consistency with the scope and effects previously analyzed in the programmatic BO; 3) project-specific incidental take vs. take estimated in the programmatic BO; and 4) project-specific reasonable and prudent measures and associated terms and conditions (*i.e.*, for non-jeopardy determinations). In the event of a “may affect” but “not likely to adversely affect” determination for a specific project that is consistent with the programmatic BO, no further evaluation by the Service is necessary and section 7(a)(2) consultation will be considered complete for that project (*e.g.*, via a concurrence letter documenting the conclusion of informal consultation).

We have reviewed the information contained in the Martin Run BA, which describes the potential effects of the proposed project on federally listed species. Most of the proposed project types (*e.g.*, timber harvesting, road construction) and their effects were discussed and evaluated in the Forest Plan BA and programmatic BO. Therefore, this consultation qualifies as a “Tier 2” consultation under the Forest Plan BO.

#### Forest Service Effect Determinations

The Forest Service initially determined that the federally listed Indiana bat, bald eagle, small-whorled pogonia (*Isotria medeoloides*), clubshell mussel, and northern riffleshell mussel occur or may occur in the project area or supporting watersheds.

Based on species surveys, and a further assessment of the potential effects of this project on listed species, the Forest Service reached a “no effect” determination for the small-whorled pogonia, clubshell, and northern riffleshell; a “may affect, not likely to adversely affect” determination for the bald eagle; and a “may affect, likely to adversely affect” determination for the Indiana bat. You requested our review of, and concurrence with, these effect determinations. Based on our review of the project BA and programmatic BO, our comments on your determinations follow.

#### *Small-whorled Pogonia*

The BA (p. 44) indicates that all sites proposed for treatment were surveyed, but that no small-whorled pogonias were found. Considering the results of these surveys, we concur with the Forest Service’s “no effect” determination.

#### *Clubshell and Northern Riffleshell*

The Western Pennsylvania Conservancy conducted mussel surveys on 10 streams on the ANF in 1994, including Tionesta Creek, East Branch Tionesta Creek, and South Branch Tionesta Creek, all of which occur in the Martin Run project area. No clubshell or northern riffleshell mussels were located during the survey. Considering the results of these surveys, we concur with the Forest Service’s “no effect” determination.

### *Bald Eagle*

Based on available information and project reconnaissance, no bald eagle nest sites are located in the proposed project area. The Kiasutha bald eagle nest site is the closest known nest from the project area, located approximately 3.5 miles away, near the Kiasutha campground (BA, p.37). A leaf-off survey of potential nesting habitat above Tionesta Creek will be conducted prior to timber harvesting; if an eagle nest is found in or near the project area, further consultation will be necessary.

Suitable bald eagle foraging habitat is available in the project area. Eagles have been sighted foraging along Tionesta Creek, which borders the western boundary of the project area (BA, p. 37). Proposed maintenance of existing roads is the only project activity that will take place within 0.25 mile of foraging habitat (BA, p. 38). Due to the distance of the project area from known bald eagle nest sites, and proposed road maintenance occurring at least 0.25 mile from foraging areas, we concur with your determination that implementation of the preferred alternative is not likely to adversely affect the bald eagle.

### *Indiana Bat*

The Forest Service determined that implementation of this project “may affect, is likely to adversely affect” the Indiana bat. Given the nature of activities associated with the proposed project, we concur with your determination that incidental take of Indiana bats is possible within the analysis areas. As described in the Service’s programmatic BO, we believe that adverse effects on the Indiana bat are likely to occur from timber harvesting, new road construction, and gravel pit construction/expansion carried out under the Forest Service’s management program. However, based on the implementation of reasonable and prudent measures, and associated terms and conditions from the programmatic BO, and the conservation measures proposed with the Martin Run project that will minimize the impact of any incidental take, we have concluded that activities associated with the Martin Run project will not result in adverse effects on the Indiana bat beyond those that were previously disclosed and discussed in the Service’s programmatic BO.

The following biological opinion is based on potential adverse effects on the Indiana bat from new gravel pit construction/expansion, new road construction, and the removal of suitable habitat during timber harvesting associated with the Martin Run project. This Tier 2 BO identifies the incidental take anticipated due to implementation of the Martin Run project (Alternative 5), and the cumulative total of incidental take that has occurred (Table 2).

### Description of the Proposed Action

The proposed project involves various timber management activities, reforestation practices, wildlife habitat improvement activities, and transportation/road activities within the Martin Run project area (Table 2, p. 9 of the BA) in Sheffield and Wetmore Townships in Warren and McKean Counties, Pennsylvania. The project area is approximately 20,303 acres, of which 80 percent (16,003 acres) is National Forest System lands and 20 percent (4300 acres) is privately owned. Currently, 85 percent of the project area is mature second growth forest and 13 percent

is forest less than 50 years of age, while the remaining 2 percent occurs in oil and gas right-of-ways and other openings (BA, p. 5).

Four alternatives were assessed in the BA. The Forest Service has selected Alternative 5 as the preliminary preferred alternative; therefore, this biological opinion focuses on the effects expected due to implementation of this alternative. The preferred alternative involves a variety of timber harvest treatments, wildlife habitat improvement work, and understory treatments, with goals of increasing the amount of late-successional forest, commercial timber harvest, and studying the effects of thinning and non-commercial release on the spread of disease. Table 1 summarizes those activities proposed under the preferred alternative that will affect potential Indiana bat habitat.

Specifically, 2485 acres of timber harvesting will occur, including: 582 acres of shelterwood seed cuts, 914 acres of thinning, 61 acres of selection harvest, 926 acres of shelterwood removal, and 2 acres of clearcut. Included in this total are 902 acres of salvage harvests due to wind-throw.

In addition to timber management activities, 23 acres of forested habitat will be affected by gravel pit construction and expansion for road betterment projects. Also, 0.39 mile of new road construction is proposed which will affect approximately two acres of forested habitat.

All the above activities will affect a total of 2510 forested acres, all of which are counted toward the cumulative annual incidental take as outlined in Table 6 (p. 67) of the programmatic BO. The types of timber harvest activities proposed were described on pages 7-8 of the programmatic BO, and the effects of timber harvesting on the Indiana bat were discussed on pages 46 and 65 of the programmatic BO. Road construction activities were described on page 9 of the programmatic BO, and were analyzed on pages 47-48 of the programmatic BO.

The Forest Service has proposed to implement the following project conservation measures (summarized from the BA, pp. 23-24), based on the presence of suitable Indiana bat habitat in the project area, and the assumption that the habitat is occupied by this species.

- Retain all shagbark and shellbark hickories (live, dead and dying), regardless of size, in partial and final harvest cutting units (green and salvage units).
- Retain 4-6 live den trees per acre. Where an inadequate number of live trees occur, retain older, larger trees, especially those with old wounds and broken limbs.
- Mark for retention a clump approximately 0.25 acre in size for every 5 acres harvested. Where possible, clumps of trees in a variety of sizes should contain any or all of the following: den trees, snags, oak/hickory, conifers, minority, and/or mast species and a variety of tree sizes. The Forest Service will protect these clumps and note the clumps on the sale area map.

Table 1. Forest impacts resulting from the preferred alternative.

<b>Activity</b>	<b>Acres</b>	<b>Type of Harvest</b>	<b>Category of Take</b>	<b>Estimated Completion</b>
Shelterwood Seedcut	324	Green Partial	Shelterwood Seed/Prep	2005-2009
Shelterwood Removal Cut	135	Green Final	Shelterwood Removal	2005-2009
Commercial Thinning	687	Green Partial	Thinning	2005-2009
2-age Final Harvest	28	Green Final	Shelterwood Removal	2005-2009
Single Tree/Group Selection Harvest	24	Green Partial	Selection Harvest	2005-2009
Clearcut to create wildlife opening	2	Green Final	Clearcut	2005-2009
Salvage Thinning	227	Salvage Partial	Thinning	2005-2009
Salvage Shelterwood Harvest	258	Salvage Partial	Shelterwood Seed/Prep	2005-2009
Salvage 2-age Final Harvest	148	Salvage Final	Shelterwood Removal	2005-2009
Salvage Group Selection Harvest	11	Salvage Partial	Selection Harvest	2005-2009
Shelterwood Removal Cut	298	Green Final	Shelterwood Removal	2010-2014
2-age Final Harvest	21	Green Final	Shelterwood Removal	2010-2014
Delayed Removal	38	Green Final	Shelterwood Removal	2010-2014
Patch Clearcut	26	Green Final	Selection Harvest	2010-2014
Salvage Shelterwood Removal	23	Salvage Final	Shelterwood Removal	2010-2014
Salvage 2-age Final Harvest	235	Salvage Final	Shelterwood Removal	2010-2014
New Road Construction	2	NA	Road Construction	2005-2009
Expand Existing Pit	20	NA	Road reconstruction / betterment	2005-2009
Construct New Pit	3	NA	Road reconstruction / betterment	2005-2009
<b>Total</b>	<b>2510</b>			

- For both partial and final harvests in green units, retain all snags. Retain at least 8-15 live trees  $\geq 9$  inches d.b.h. per acre in final harvest units, and at least 16 live trees  $\geq 9$  inches d.b.h. per acre in partial harvest units.
- Live residual trees to be retained will be Class 1 or Class 2 trees (Romme *et al.* 1995), or other trees exhibiting or likely to develop characteristics preferred by Indiana bats (*e.g.*, exfoliating bark).
- For partial/intermediate harvests in healthy stands, reduce canopy closure to  $>54$  percent.
- Designate and retain living residual trees in the vicinity of one third of all large diameter snags with exfoliating bark to provide them with partial shade in summer.
- If a new roost is identified during implementation of the selected alternative, the following mitigation measures will be implemented.

In order to minimize incidental take of roosting bats, all known roost trees on the ANF will be protected until such time as they no longer serve as a roost (*e.g.*, loss of exfoliating bark or cavities, blown down or decay). In the event that it becomes absolutely necessary to remove a known Indiana bat roost tree, such a removal will be conducted through consultation with FWS, during the time period when the bats are likely to be in hibernation (November 15 through March 15). Trees identified as immediate threats to public safety may be removed at any time following consultation with the FWS. Such removal, however, will be a last resort, after other alternatives (such as fencing the area, etc.) have been considered and deemed unacceptable.

Activities within a 1.5-mile radius of Indiana bat maternity sites will be subject to further consultation. Such activities include those which may affect the Indiana bat or alter its habitat (*e.g.*, by removing potential roost trees or altering percent canopy closure), such as timber harvesting, road construction, trail construction, and federal oil and gas development. In addition, if an Indiana bat maternity site is found on the ANF, the Forest Service shall consult with the FWS to determine/develop standards and guidelines and/or a conservation plan to protect and manage the site.

Other proposed activities associated with the preferred alternative are not expected to remove suitable Indiana bat habitat, or result in direct or indirect effects on, or take of, the Indiana bat. These activities include wildlife habitat improvement projects, herbicide treatments, reforestation activities, and road improvement and decommissioning projects.

### Status of the Species

Species description, life history, population dynamics, status and distribution of the Indiana bat are fully described on pages 21 to 36 of the programmatic BO, and are hereby incorporated by reference. New information on the status of the Indiana bat obtained since the Forest Plan and programmatic BO follow.

Based on the 2001 winter census, the total known Indiana bat population was estimated to be 380,000, down from approximately 880,000 bats in 1960. Approximately half of the population hibernated in eight Priority 1 hibernacula in Indiana, Kentucky and Missouri (Clawson 2002). The 2001 winter count at Priority 1 hibernacula was 102,870 bats, down from the 115,885 Indiana bats that were estimated in 1999 at the same locations (Richard Clawson, Missouri Department of Conservation, *in litt.* 2001 – as presented at the Indiana Bat Symposium held in Lexington, Kentucky, March 29-31, 2001).

In Pennsylvania, an Indiana bat hibernaculum was located in January of 2000 in an abandoned limestone mine in Armstrong County, approximately 50 miles southwest of the ANF. During a survey of the mine, 67 Indiana bats were located; however, additional surveys of this extensive mine system are needed to determine the extent of this wintering Indiana bat population. Another Indiana bat hibernaculum was recently located in Lawrence County (southwest of the ANF). A survey of this abandoned limestone mine in 2001 revealed the presence of 21 Indiana bats. In February of 2003, the Pennsylvania Game Commission documented the presence of 765 Indiana bats at the Canoe Creek mine in Blair County, approximately 75 miles southeast of the ANF. In February of 2001, the Indiana bat count at the Canoe Creek mine was 604 bats.

Terms and conditions from the programmatic BO (p. 73-75, item 5), describe monitoring procedures for the Forest Service to use to determine use of the ANF by Indiana bats. Between 1998 and 2003, 236 sites were surveyed (*i.e.*, mist-netted) for bats on the ANF. In addition, 123 of these sites were also sampled using Anabat detectors. The mist net survey protocol from the draft Indiana Bat Recovery Plan has been used, and in some cases, sampling efforts exceeded those outlined in the protocol. One male Indiana bat was captured on the ANF in 1998, and another male Indiana bat was captured in 2001 on private land adjacent to the ANF.

Between 1998 and 2001, potential Indiana bat vocalizations were detected at 16 of 123 Anabat sampling sites. Positive detection of bats with this equipment could form the basis for a presumption of Indiana bat presence. Recent studies indicate that the echo-location calls of Indiana bats can be distinguished from other *Myotis* bats. While the system definitely shows promise, it still requires substantial development before it can reliably determine whether Indiana bat vocalizations were detected. At this time, the Service does not believe that this technique alone (*i.e.*, without positive mist-net survey results) is sufficient to determine whether Indiana bats are present in a project's action area.

Other mist-netting efforts in and near the ANF included a survey conducted in 2001 in association with a proposed natural gas pipeline project. During that survey effort, mist-netting was conducted at 100 sites along the proposed pipeline right-of-way, which extends from the Pennsylvania-Ohio State line in Lawrence County (near the North Fork Little Beaver Creek) east to Clinton County, Pennsylvania (near the town of Tamarack). The pipeline goes through portions of Lawrence, Butler, Armstrong, Clarion, Jefferson, Elk, Forest, McKean, Cameron, Potter, and Clinton Counties, Pennsylvania. Portions of McKean, Forest, and Elk Counties occur within the ANF proclamation boundary. Out of the 100 sites surveyed, 12 survey sites were located within the ANF. No Indiana bats were captured at any of the survey sites.

## Environmental Baseline

The environmental baseline for the ANF was established and described on pages 7-12 and 42-44 in the programmatic BO. Since issuance of the BO, the environmental baseline on the ANF has changed as follows.

### *Factors Affecting the Species' Environment (on the ANF)*

The percentage of trees in the 90 years and older age classes has increased, and includes a 6.8 percent increase in trees in the 90-109 year-old age class, and an increase of 9.6 percent in trees 110 years and older. Conversely, trees in the 60-89 year age class have decreased by 4.3 percent. Additionally, there has been a decrease of 9.9 percent in trees in the 20-59 year age class and a 2.1 percent decrease in under-stocked savannahs and openings. Stands in the 0-19 year age class have increased slightly (0.2 percent). Other changes relate to a decrease in timber harvest between 1998 and 2001. The average timber harvest on the ANF has decreased from an average annual harvest of 7556 acres between 1986 and 1997, to 2253 acres between 1998 and 2004. This represents a 70 percent reduction in average annual timber harvest levels.

Although the amount of timber harvest has been reduced in the last five years, the mix of timber harvest practices has remained relatively unchanged. Of the 2557 acres harvested annually on the ANF between 1998 and 2001, an annual average of 789 acres (31 percent) involves thinning and salvage treatments, 175 acres (7 percent) includes uneven-aged management (*i.e.*, group and individual tree selection), and 902 acres (62 percent) were associated with even-aged regeneration harvest techniques (*e.g.*, shelterwood seedtree harvest, removal cutting and clear-cutting). Although the amount of timber harvest has been reduced since 1997, reforestation treatments have not changed appreciably. Since 1998, the average annual amount of reforestation (herbicide application, site preparation, TSI, fencing, planting, fertilization, release) that has occurred on ANF has been 4818 acres. The average annual amount was 4469 acres between 1986 and 1997.

Activities that benefit wildlife such as prescribed fire, tree and shrub planting, opening construction, and shrub and tree release have decreased from an average annual amount of approximately 2200 acres between 1986 and 1997, to an average annual amount of approximately 1600 acres since 1998. This represents a 30 percent reduction in the total amount of wildlife and fish habitat improvement work that has been completed annually across the ANF since the programmatic BO was issued.

There has also been a reduction in the amount of road work completed on the ANF. New road construction has dropped from an annual average of 13.7 miles between 1986 and 1997, to an annual average of 0.1 mile of new road construction since 1998. Road reconstruction has had a similar reduction, and road betterment has dropped from an average annual of 10.1 miles from 1986 to 1997, to an annual amount of 0.1 mile between 1998 and 2000. Since 1998, the average annual amount of road restoration has been 36.9 miles, which represents a 22 percent reduction in annual road restoration over what was completed between 1986 and 1997 (46.8 miles per year).

### *Status of the Species Within the Action Area*

Between 1998 and 2004, mist-netting surveys were conducted at 17 sites within the project area, and at an additional 15 sites within two miles of the project area. No Indiana bats were captured; however, potential Indiana bat vocalizations were detected via Anabat within the Tionesta Scenic and Natural Area. No timber harvests are proposed in this part of the Martin Run project area. In July 2003, the ANF experienced a severe windstorm, which resulted in varying degrees of tree damage and blow down throughout the forest, of which approximately 902 acres are proposed for partial and final salvage harvests. Due to the presence of suitable roosting and foraging habitat in the project area, the Forest Service has assumed that Indiana bats are present.

The project area was evaluated to determine the amount and distribution of Indiana bat habitat. This is the area that would be expected to receive use, if an Indiana bat roost site occurred in a treatment stand. Based on this analysis, suitable habitat occurs on approximately 90 percent of the project area (BA, p. 19).

### Effects of the Action

Forest Service analysis of the preliminary preferred alternative for the Martin Run project includes consideration of the assumed presence of Indiana bats and their habitat in the project area. The Fish and Wildlife Service anticipates that the proposed actions associated with the Martin Run project could result in the incidental take of Indiana bats through harm or harassment, especially if those activities occur when bats may be present (*i.e.*, between April 1 and September 30).

Activities associated with this project that may result in incidental take of the Indiana bat include: 2485 acres of timber harvesting, 23 acres of forest removal for gravel pit expansion/construction, and approximately two acres of tree removal for new road construction. In total, 2510 acres of forest will be cut or harvested between 2005 and 2014. Within the project area, these activities will result in a 4 percent reduction in the total available suitable roosting and foraging habitat for Indiana bats; however, it will increase optimum roosting and foraging habitat by approximately 2 percent (BA, p. 29).

The types of timber harvest activities proposed were described on pages 7-8 of the programmatic BO. The potential direct and indirect effects to the Indiana bat from harvest or removal of trees due to timber harvesting and road construction are consistent with those identified and evaluated in the programmatic BO (pp. 46-48, 51, 65-66), and are hereby incorporated by reference. The types of road construction and maintenance activities were described on page 9 of the programmatic BO. The potential direct and indirect effects to the Indiana bat from these types of activities are consistent with those identified and evaluated in the programmatic BO (pp. 47-48), and are hereby incorporated by reference. Minimization of adverse effects will be addressed by implementation of the project-specific conservation measures, as described in the "Proposed Action" section of this opinion.

The salvage of wind-thrown trees was not specifically evaluated or discussed in the programmatic BO; therefore, incidental take for this specific type of harvest activity was not estimated in the programmatic BO. Unlike most salvage harvests on the Forest, which focus on the removal of standing trees that have been damaged by insects or disease, wind-throw salvage operations target trees that have been blown over or tipped to a leaning position by the wind. Even if the Forest Service took no action to salvage leaning trees, they would fall to the ground and become unavailable as potential Indiana bat roost trees within a few years. Although wind-throw salvage harvests will result in less of an effect on potential Indiana bat foraging and roosting habitat than the timber harvest activities discussed in the programmatic BO, the Forest Service has chosen to include wind-throw salvage harvests proposed for the Martin Run project under the take categories in the programmatic BO (e.g., thinning, shelterwood removal).

As described in the Service's programmatic BO, we believe that adverse effects on the Indiana bat are likely to occur from timber harvesting and other tree-cutting activities under the Forest Service's management program activities. Therefore, given the nature of activities associated with the proposed project, we believe that incidental take of Indiana bats is possible within the project area. However, we have concluded that activities associated with the Martin Run project will not result in adverse effects to the Indiana bat beyond those that were previously disclosed and discussed in the Service's programmatic BO.

#### Cumulative Effects

Cumulative effects include the effects of future State, tribal, local, or private actions that are reasonably certain to occur in the action area considered in this biological opinion. The action area is the area where the direct and indirect effects of the federal action are anticipated to occur. Oil and gas development is likely to continue to occur within the action area. It is estimated that 408 active oil and gas wells occur within the project area, and that an additional 176 wells will be developed in the project area in the next 20 years. The Forest Service does not hold most subsurface rights on the Allegheny National Forest. Development of oil and gas resources depends on market conditions, and the economic status of the companies that develop these resources.

#### Conclusion

The actions and effects associated with the proposed Martin Run project are consistent with those identified and discussed in the Service's programmatic BO. After reviewing the size and scope of the project, the environmental baseline, the overall status of the Indiana bat, the effects of the action, and the cumulative effects, it is the Service's biological opinion that the proposed action is not likely to jeopardize the continued existence of the Indiana bat.

This project has not resulted in a jeopardy determination because: 1) the project's impacts are consistent with those identified and discussed in the programmatic BO; and 2) the Forest Service has proposed to implement project conservation measures to minimize take, including Forest Plan standards and guidelines, and the terms and conditions from the programmatic BO.

## Incidental Take Statement

This biological opinion is based on likely adverse effects on the Indiana bat due to the removal of suitable foraging and roosting habitat during timber harvesting and other activities within the Martin Run project area. This Tier 2 BO identifies the incidental take anticipated due to implementation of the Martin Run project (Alternative 5), and the cumulative total of incidental take which has occurred (Table 2).

Consistent with the approach taken in the programmatic BO, incidental take for this species is measured indirectly as loss or alteration of forested habitat (in acres), as outlined in Table 2. Thus, implementation of the preferred alternative will result in the take of Indiana bats, as measured by the loss/alteration of 2510 acres of forested habitat between 2005 and 2014. This take is counted toward the cumulative annual incidental take as outlined in the programmatic BO (Table 6, p. 67).

The actual incidental take reported by the Forest Service (fiscal years 1998 through 2004), has consistently been far below the annual levels estimated (authorized) in the programmatic BO (see Table 2). Therefore, we do not anticipate that implementation of this project will cause the take levels in the programmatic BO to be exceeded.

Table 2. Actual vs. authorized incidental take (as measured indirectly by acreage) due to the removal or disturbance of potential Indiana bat habitat on the Allegheny National Forest.

Activity	Acres Actually vs. (Authorized to be) Removed/Disturbed							Total <sup>2</sup>
	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY <sup>1</sup> 2004	
<b>Trail Construction</b>								
• Pedestrian	.3 (0)	7.8 (8)	.3 (2)	.2 (2)	0 (2)	0 (2)	0 (2)	8.6 (16)
• Motorized - winter	.3 (4)	3.6 (0)	0 (4)	.6 (4)	0 (4)	0 (4)	0 (4)	4.5 (20)
• Motorized - summer	6 (0)	1.2 (0)	3.2 (4)	2.14 (4)	0 (4)	0.42 (4)	0 (4)	12.96 (16)
<b>Timber Management</b>								
• Clearcut	191 (220)	222 (220)	0 (420)	59 (220)	6 (220)	0 (220)	15 (220)	493 (1520)
• Shelterwood seed/ prep	1558 (1640)	521 (1640)	299 (4000)	395 (2000)	575 (2000)	518 (2000)	288 (2000)	4211 (13,280)
• Shelterwood Removal	1203 (1864)	573 (1864)	488 (1864)	843 (1864)	381 (1864)	617 (1864)	621 (1864)	4829 (11,184)
• Thinning	1526 (3225)	732 (3225)	240 (7000)	659 (3225)	988 (3225)	692 (3225)	707 (3225)	5579 (23,125)
• Selection cut	458 (334)	184 (334)	17 (700)	40 (800)	63 (800)	0 (800)	90 (800)	942 (3768)
<b>Wildlife Habitat Management</b>	10 (10)	7 (10)	4 (10)	0 (10)	0 (10)	5 (10)	8 (10)	34 (60)
<b>Prescribed Burning</b>	0 (40)	10 (40)	3 (40)	0 (40)	0 (40)	0 (40)	0 (40)	13 (240)
<b>Roads</b>								
• Construction	0 (1)	0 (0)	0 (73)	1 (55)	2 (55)	0 (55)	0 (55)	3 (239)
• Reconstruction/ Betterment	0 (0)	0 (0)	0 (55)	4.44 (55)	2 (55)	0 (55)	0 (55)	7 (220)
• Restoration	2 (2)	3 (3)	4 (3)	2 (3)	1 (3)	3 (3)	3 (3)	18 (17)
<b>Oil and Gas Development</b>	149 (149)	206 (112)	259 (112)	236 (112)	194 (112)	152 (112)	165.33 (112)	1361 (709)
<b>TOTALS</b>	5104 (7489)	2471 (7456)	1318 (14,287)	2244 (8394)	2212 (8394)	1987 (8394)	1897 (8394)	17,516 (54,414)

<sup>1</sup> Although carry-over of un-used incidental take from previous fiscal years has been authorized, incidental take cannot exceed the activity-specific levels for FY 2003, or the activity-specific total.

<sup>2</sup> Total actual take (FY 1998-FY 2004) vs. authorized take (total estimated in Forest Plan BO)

### Reasonable and Prudent Measures

The Service believes the following reasonable and prudent measure is necessary and appropriate to minimize take of the Indiana bat:

1. Ensure that conservation measures are implemented to minimize adverse effects on federally listed species.

### Terms and Conditions

To be exempt from the prohibitions of section 9 of the Endangered Species Act, the Forest Service must comply with the following terms and conditions, which implement the reasonable and prudent measures described above, and outline reporting and monitoring requirements. These terms and conditions are non-discretionary:

1. Implement project conservation measures (as detailed on pages 19 and 23 of the BA; and pages 6-7 of this BO).
2. Continue to report incidental take to the Fish and Wildlife Service quarterly.

### Reinitiation Notice

We would like to remind you that, in accordance with our June 1, 1999, biological opinion, and the June 1, 2000, amendment to that opinion, incidental take that occurs as a result of this and other projects on the ANF cannot exceed the annual or cumulative incidental take levels established in the programmatic biological opinion. If implementation of any project or projects is anticipated to exceed these take levels, further consultation will be necessary. To ensure that incidental take is not exceeded, quarterly reports should continue to be provided to this office tabulating the amount of incidental take (as it occurs) on projects being implemented throughout the Forest, as indirectly measured by acres affected. In addition, you should be aware that this project may be subject to further consultation pending the outcome of future consultations on the Forest Plan or Forest Plan amendments.

Should new information reveal that the agency action may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; or the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or a new species is listed or critical habitat is designated that may be affected by the action; or the amount or extent of take as identified in Table 2 is exceeded, reinitiation of formal consultation as outlined in 50 CFR 402.16 is required.

*To avoid potential delays in reviewing your project, please use the above-referenced USFWS project tracking number in any future correspondence regarding this project.*

If you have any questions regarding our response, or if you need additional information, please contact Jennifer Dombroskie of my staff at 814-234-4090.

Sincerely,

David Densmore  
Supervisor

cc:  
ES file - archive  
Readers file  
ES: PAFO:Jdombroskie/jd:ckc:tp:2/1105  
Filename: Martin Run MBO\_021105

## LITERATURE CITED

- Clawson, R.L. 2002. Trends in population size and current status *in* Kurta A., and J. Kennedy, eds. The Indiana bat: biology and management of an endangered species. Bat Conservation International, Austin, Texas.
- Romme, R.C., K. Tyrell and V. Brack, Jr. 1995. Literature summary and habitat suitability index model: components of summer habitat for the Indiana bat, *Myotis sodalis*. Report submitted to the Indiana Department of Natural Resources, Division of Wildlife, Bloomington, Indiana by 3D/Environmental, Cincinnati, Ohio. Federal Aid Project E-1-7, Study No. 8, 38 pp.