



December 5, 2014

**BY EFILE**

Public Comments Processing

Attn: FWS-R4-ES-2014-0046

Division of Policy and Directives Management

U.S. Fish and Wildlife Service

MS: BPHC

5275 Leesburg Pike

Falls Church, VA 22041-3803

**Re: Proposed Rule: Threatened Species Status for Black Pinesnake, Docket No. FWS-R4-ES-2014-0046**

Dear Ms. Campbell:

This letter is submitted on behalf of the United States Association of Reptile Keepers (“USARK”), in response to the U.S. Fish and Wildlife Service’s (“FWS” or “Service”) proposed rule to list the black pinesnake (*Pituophis melanoleucus lodingi*) as a threatened species under the Endangered Species Act (“ESA”).<sup>1</sup> FWS has issued this proposed rule as the result of a 2011 agreement with the Center for Biological Diversity and WildEarth Guardians, which compelled the agency to rapidly review over 250 species to determine whether they should be listed under the ESA.

USARK is a non-profit membership organization representing breeders, hobbyists, conservationists, business owners, herpetologists, and scientists who work with or in the reptile industry. The black pinesnake is popular among snake enthusiasts and hobbyists. In brief, we recognize that this snake subspecies faces significant threats in its native range, but also that substantial efforts are being undertaken by the states of Mississippi and Alabama, private landowners, the zoological community, private conservation organizations, and pet breeders and owners to protect these animals and their habitat. Additionally, the subspecies is already protected by state laws throughout its entire range. USARK believes that, given these factors and that the scientific record is speculative and controversial, the subspecies should be listed as threatened at most.

Alabama and Mississippi have each crafted laws and regulations that address its citizens’ needs and concerns, striking a balance among environmental protection, human health and welfare, and the rights and interests of their citizens. These controls mean that adopting the

---

<sup>1</sup> 79 Fed. Reg. 60406 (Oct. 7, 2014).





proposed rule would provide no conservation benefit, but would significantly intrude on the rights of pet owners and hobbyists, impede work of researchers, conservationists and zoological institutions, and destroy small businesses, causing economic damage.

For these reasons, if the subspecies is listed as threatened, USARK urges the Service to exclude captive-bred animals from the listing or, in the alternative, issue a 4(d) rule to allow the unfettered continuation of captive breeding, pet ownership, and trade.

## **I. THE RECORD SUPPORTS ONLY A “THREATENED” LISTING, IF ANY**

### **A. The Wild Stock Population Status Is Highly Uncertain**

There is little dispute that longleaf pine forests, which constitute the black pinesnake’s primary habitat, have been greatly reduced from historic levels. Indeed, the proposed rule lists habitat loss from silviculture, urbanization, and fire suppression, and population decline from road mortality, as primary reasons to warrant listing (along with intentional killing and a low reproductive rate).<sup>2</sup>

Despite the documented loss of habitat, very little information is known relating to the snake’s actual population status. The proposed rule admits that the minimum amount of habitat required to support a viable population is unknown.<sup>3</sup> There is similarly a complete lack of information on historical population trends. Nearly all of the information presented in the proposed rule is from the De Soto National Forest, indicating that there is not enough data to estimate population status elsewhere in this subspecies’ range. Nor is there reliable, scientifically rigorous survey information, as this is a secretive, borrowing subspecies and is “difficult to locate even in areas where it is known to occur.”<sup>4</sup> An equivalent lack of data informs the assumptions in the proposed rule related to the subspecies’ life history, including its breeding behavior<sup>5</sup> and whether it exhibits seasonal movement.<sup>6</sup> Nearly all of the cited materials are unpublished; only three papers that are specific to this subspecies appear as peer-reviewed journal publications.

Congress enacted the ESA as an action-forcing conservation statute designed to ensure meaningful protections for species that, based upon the best available science, are determined to either be “endangered” or “threatened.” The best science standard precludes decisions based simply on precaution when information is uncertain or incomplete. Indeed, courts have universally

---

<sup>2</sup> *Id.* at 60406.

<sup>3</sup> *Id.* at 60408.

<sup>4</sup> *Id.* at 60410.

<sup>5</sup> *Id.* at 60409 (“Very little information on the black pinesnake’s breeding and egg-laying is available from the wild.”).

<sup>6</sup> *Id.* at 60408 (“Pinesnakes *may* show some seasonal movement trends of emerging from overwintering sites in February, moving an active area from March until September, and then moving back to their overwintering areas.” (emphasis added)).



held that the decision to list a species as threatened or endangered is not to be based on speculation or a misplaced intent to err on the side of species conservation:

Under Section 4, the default position for all species is that they are not protected under the ESA. A species receives the protections of the ESA only when it is added to the list of threatened species after an affirmative determination that it is “likely to become endangered within the foreseeable future.” Although an agency must still use the best available science to make that determination, *Conner [v. Burford]*, 848 F.2d 1441 (9th Cir. 1988) cannot be read to require an agency to “give the benefit of the doubt to the species” under Section 4 if the data is uncertain or inconclusive. Such a reading would require listing a species as threatened if there is any possibility of it becoming endangered in the foreseeable future. This would result in all or nearly all species being listed as threatened.<sup>7</sup>

In other words, FWS is charged with making its ESA listing decisions based solely on the information available, using its best scientific judgment.

The ESA defines the term “endangered species” as “any species which is in danger of extinction throughout all or a significant portion of its range.”<sup>8</sup> The term “threatened species” is defined as “any species which is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.”<sup>9</sup> Thus, as FWS recognizes, the key distinction is that an “endangered species” to be one that is in “imminent” danger of extinction,<sup>10</sup> whereas a “threatened species” is only likely to become so at a later, but “foreseeable,” time.

The ESA also requires that a decision to list a species as “endangered” be based on imminent, not conjectural, threats. “The ESA applies to those species ‘so depleted in numbers that they *are* in danger of or threatened with extinction.’”<sup>11</sup> When determining present danger, FWS has a “duty to show the relationship between the data relied upon and its conclusion to list”<sup>12</sup> and must support its determination with “best available scientific and commercial data.”<sup>13</sup> FWS must,

---

<sup>7</sup> *Trout Unlimited v. Lohn*, 645 F. Supp. 2d 929, 947 (D. Or. 2007); see also *Ctr. for Biological Diversity v. Lubchenco*, 758 F. Supp. 2d 945, 955 (N.D. Cal. 2010) (finding that the “benefit of the doubt” concept does not apply in the § 4 listing context); *Or. Nat'l Res. Council v. Daley*, 6 F. Supp. 2d 1139, 1152 (D. Or. 1998) (ESA requires a determination as to the likelihood – rather than merely the prospect – that a species will or will not become endangered in the foreseeable future); *Fed'n of Fly Tortoiseseers v. Daley*, 131 F. Supp. 2d 1158, 1165 (N.D. Cal. 2000) (“The ESA cannot be administered on the basis of speculation or surmise.”).

<sup>8</sup> *Id.* § (6).

<sup>9</sup> *Id.* § (20).

<sup>10</sup> See, e.g., *In Re Polar Bear Endangered Species Act Listing and §4(d) Rule Litigation*, 794 F. Supp. 2d 65, 89 (D.D.C. 2010) (upholding FWS’s “general understanding that an endangered species is” one that is “on the brink of extinction”).

<sup>11</sup> *San Luis v. Badgley*, 136 F. Supp. 2d 1136, 149 (E.D. Cal. 2000) (16 U.S.C. § 1531(a)(2) (emphasis added)).

<sup>12</sup> *Id.*

<sup>13</sup> 16 U.S.C. § 1533(b)(1)(A), which in full states: “The Secretary shall make determinations required by subsection (a)(1) of this section solely on the basis of the best scientific and commercial data available to him after conducting a review of the status of the species and after taking into account those efforts, if any, being made by any State or

3



moreover, be able to identify in and from the record, a threat's potential imminent impacts on a particular species.

The scientific record for the black pinesnake simply does not support an endangered listing. Given the vast uncertainty regarding its population status and life history characteristics, the Service cannot show that the endangered criteria are met.

## **B. The Black Pinesnake Is Adequately Protected by Existing Regulatory Mechanisms**

Under the ESA, FWS must account for all conservation measures and must explain why these measures are inadequate to protect the species. A listing determination under the ESA may be made only “after taking into account those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species, whether by predator control, protection of habitat and food supply, or other conservation practices, within any area under its jurisdiction.”<sup>14</sup> Additionally, the Secretary must consider the “inadequacy of existing regulatory mechanisms.”<sup>15</sup> Since 2003, FWS has interpreted and employed these requirements under its binding *Policy for Evaluation of Conservation Efforts When Making Listing Decisions* (“PECE”) as meaning that, “The [ESA] requires us to take into account all conservation efforts being made to protect a species.”<sup>16</sup> Courts have upheld FWS employing its PECE and considering the full array of conservation strategies employed.<sup>17</sup>

As stated in the proposed rule, the black pinesnake is currently known to live in the wild only in Mississippi and Alabama.<sup>18</sup> Both states have regulations that restrict collecting, killing, or selling the snake. Given that each state has used the ability to protect its and its citizens' interests by adopting locally-appropriate regulations to protect these snakes, as does the Department of Interior over federal lands it administers, no conservation or public policy is furthered by implementing additional regulations.

The states' regulations provide nearly identical protections that would be provided through a federal ESA listing. Alabama law explicitly prohibits the take, killing, possession, or sale of a

---

foreign nation, or any political subdivision of a State or foreign nation, to protect such species, whether by predator control, protection of habitat and food supply, or other conservation practices, within any area under its jurisdiction; or on the high seas.”

<sup>14</sup> 16 U.S.C. § 1533(b)(1)(A).

<sup>15</sup> *Id.* § 1533(a)(1).

<sup>16</sup> 68 Fed. Reg. 15100, 15100 (Mar. 28, 2003) (emphasis added).

<sup>17</sup> *See, e.g., Colorado River Cutthroat Trout v. Salazar*, 2012 WL 4890100 (D.D.C. 2012) (consideration of voluntary conservation strategy undertaken by several states in conjunction with FWS was appropriate in its finding that trout species was not endangered under the ESA). *Greater Yellowstone Coalition, Inc. v. Servheen*, 665 F.3d 1015 (9th Cir. 2011) (FWS reasonably could conclude that National Forest Plans provide adequate regulatory mechanisms to protect Yellowstone grizzly bear as recovered species since it is legally binding on 98% of critical primary conservation area). *In re Polar Bear Endangered Species Act Listing and § 4(d) Rule Litigation*, 794 F. Supp. 2d 65 (D.D.C. 2011) (FWS properly took into account foreign conservation efforts to protect bears).

<sup>18</sup> 79 Fed. Reg. at 60410.





black pinesnake without a valid state-issued permit.<sup>19</sup> Mississippi, for its part, includes the black pinesnake on its state Threatened and Endangered List.<sup>20</sup> The endangered listing makes it “unlawful for any person to take, possess, transport, export, process, sell or offer for sale or ship” the snake.<sup>21</sup>

Moreover, the FWS recognizes in the proposed rule that the majority of the remaining suitable land for black pinesnake habitation is in the De Soto National Forest<sup>22</sup>—land that is already federally managed. The U.S. Department of Agriculture, through the Forest Service, manages National Forests using regional Land and Resource Management Plans (“LRMPs”). Comprehensive updates to the Mississippi LRMP<sup>23</sup> are currently in agency review and expected to be implemented shortly.<sup>24</sup> The updated LRMP will implement forest management activities that promote longleaf pine ecosystem restoration, which provide habitat and protection for the black pinesnake.<sup>25</sup> This includes restoring longleaf pine within its natural range in the Bienville, De Soto, and Homochitto National Forests by increasing annual prescribed fire applications to 220,000 acres, maintaining forest and plant community types not abundant on private lands, managing to increase populations of several native plant and animal species, attaining sufficient levels of old growth in all communities for biological needs, and designating research areas, among other activities.<sup>26</sup>

In addition to the strict restrictions on take promulgated through the state laws, each state recognizes the importance of fostering voluntary conservation efforts as a matter of law and policy. As a result, voluntary measures on the part of private landowners to preserve and enhance pinesnake habitat have been well-established in both states. These include the Longleaf Alliance, the America's Longleaf Restoration Initiative, the Longleaf Stewardship Fund, and American Forest Foundation's Piney Woods Project, among others. As noted in the proposed rule, the Mississippi Army National Guard has also drafted a candidate conservation agreement to implement proactive conservation and management measures for this subspecies in De Soto National Forest.

---

<sup>19</sup> Ala. Admin. Code r. 220-2-.92(1)(c) (“It shall be unlawful to take, capture, kill, or attempt to take, capture or kill; possess, sell, trade for anything of monetary value, or offer to sell or trade for anything of monetary value, the following nongame wildlife species (or any parts or reproductive products of such species)...”).

<sup>20</sup> Mississippi Dept. of Wildlife, Fisheries, and Parks, *Listed Species of Mississippi* (2011).

<sup>21</sup> Miss. Code Ann. § 49-5-109.

<sup>22</sup> 79 Fed. Reg. at 60410.

<sup>23</sup> U.S. Department of Agriculture, *Draft Environmental Impact Statement Revised Land and Resource Management Plan National Forests in Mississippi* (Dec. 2012).

<sup>24</sup> See 79 Fed. Reg. at 53061 (Sept. 5, 2014).

<sup>25</sup> LRMP at iii (“The emphasis in this forest plan on thinning; converting loblolly and slash pine stands that are not on appropriate sites to longleaf and shortleaf pine forests; and restoring rare communities and old growth; is expected to not only improve native species diversity but also improve resilience of ecological communities to non-native invasive species, disease and insect outbreaks, extreme weather disturbances associated with climate change, and other stressors.”)

<sup>26</sup> *Id.* at 19.



## **II. IF THE SNAKE IS LISTED, CAPTIVE POPULATIONS SHOULD BE EXCLUDED OR AN ADDITIONAL 4(D) RULE MUST BE ISSUED FOR PET OWNERS**

There are no overarching legal mandates requiring FWS to impose threatened or endangered status on the domestic captive-bred black pinesnake when addressing concerns of the wild population in its native range. The domestic black pinesnake population today is entirely captive-bred and regulated. Sweeping these captive snakes into an ESA listing provides little or no protection beyond what is already available under state laws. Further, it would completely undermine the intended conservation benefits of the listing.

To that end, we strongly urge FWS to employ the substantial discretion it has to define “species” for the purposes of the law. Nothing within the ESA prohibits the Services from recognizing a captive population of a species as distinct from those in the wild. FWS may, and should, simply limit any listing of the black pinesnake to wild animals.

As an alternative strategy to facilitate the continuation of the captive snake trade, FWS could issue a 4(d) rule permitting reasonable activities for pet owners and breeders. This would allow the Service to avoid triggering automatic protections under Sections 7 and 9 of the ESA, and provides it with the flexibility to choose “such regulations as [the Service] deems necessary and advisable to provide for the conservation of such species.”<sup>27</sup> In the present action, FWS has already proposed a 4(d) rule for prescribed burns, as more natural fire regimes are expected to increase the snake’s survival. USARK urges the Service to issue an additional rule so that the agency may tailor its regulations to protect wild black pinesnakes without adversely impacting private domestic herpetoculture.

Listing species that have long been extant throughout the United States and subject to pet ownership and interstate commerce for several decades, as has the black pinesnake, comes with a higher burden to show the necessity of including captive populations in such a listing. Principles of reasoned decision-making, read in light of the statute’s purpose and application, require more than a speculative threat to wild populations if an entire industry is to be extinguished.

### **A. Captive Breeding and Pet Maintenance Pose No Threat to Wild Black Pinesnake Populations**

There is a large global pet trade for black pinesnakes. The subspecies is very popular for snake enthusiasts and has been bred in captivity since at least the early 1990s but likely much earlier.<sup>28</sup> Several hundred, if not over one thousand, people work with these snakes in captivity, and it is therefore believed that more of these snakes are hatched in captivity than in the wild on an annual basis. Female snakes that are bred in captivity typically lay 5-20 eggs per year, and over 95% of all stocks currently in captivity are from *multiple* generations of captive bred individuals.

---

<sup>27</sup> 16 U.S.C. § 1533(d).

<sup>28</sup> See, e.g., W. P. Mara, Pine Snakes: A Complete Guide (1994).



The proposed rule acknowledges this in stating that overutilization for commercial purposes is not a threat to wild populations because “the pet trade is currently saturated with captive-bred black pinesnakes.”<sup>29</sup>

In addition to the market saturation, there is simply no incentive to catch snakes from the wild population and offer them for sale. Not only are there harsh penalties for taking wild snakes under state law, as discussed above, but black pinesnakes’ valuation is based upon how solidly black the parents of a clutch are. This trait is selectively bred, and therefore wild snakes have little value to hobbyists.

## **B. The Pet Trade Provides Important Economic Benefits**

The thriving industry for trade in black pinesnakes plays a small, but important role in the economy. As we have stated in previous comments to the Service, the U.S. reptile industry is valued at over \$1 billion annually. Although the black pinesnake is not among the most commonly traded species, it has a loyal following among hobbyists. The snakes are easily available for purchase directly from breeders both at trade shows and online. The captive bred offspring sell for between \$75 and \$200, with \$125 being the average. Pinesnakes are known among enthusiasts for their pleasant temperaments, particularly when raised from birth. They are also considered to be particularly well-suited as pets because of their hearty disposition and relative ease of care.<sup>30</sup>

## **C. The Pet Trade Provides Important Conservation Benefits**

The captive breeding program is a vital part of the long-term survival program for this subspecies, as a relatively large number of snakes are born in captivity each year compared to wild population size estimates. Experts and conservationists recognize captive breeding as an essential hedge against extinction, maintaining genetic integrity and a continuous supply of stock that can be used to augment and reintroduce wild populations. The domestic trade which occurs likewise helps provide for this subspecies’ conservation by augmenting the limited biological and life history information known about the subspecies.

Further, a large segment of USARK’s membership is engaged in conservation education, both regionally and nationally. They, along with USARK as an organization, provide opportunities for students and adults alike to learn about and become interested in these animals, fostering appreciation for their survival, and respect for the natural environment. The proposed listing will result in severe limitations on these efforts.

As such, the continued operation of breeding and captive trade activities is fully consistent with the ESA’s purpose of “provid[ing] a program for the conservation of... endangered species

---

<sup>29</sup> 79 Fed. Reg. at 60412.

<sup>30</sup> Tim Spuckler, *The Natural History, Care & Breeding of Black Pine Snakes Pituophis melanoleucus lodingi* (2014), available at <http://www.thirdeyeherp.com/bptext.htm>.



and threatened species.”<sup>31</sup> USARK therefore strongly urges FWS to use all flexibility the law provides to maintain the U.S. industry as it exists today.

#### **D. Existing Pet Owners Must be Allowed to Keep Their Pets and Provide Necessary Care, Including through Reasonable Transport and Sale**

If the black pinesnake is listed as threatened, limitations will be placed on the interstate transportation of captive animals even if existing owners are allowed to maintain those animals. This serves no rational purpose. Sale of captive snakes or their offspring would become virtually impossible. If the subspecies is listed as threatened, and captive animals are neither excluded from the listing or protected under a 4(d) rule, it is unclear whether an owner could even seek care for her black pinesnake if the nearest herpetological veterinarian was located on the wrong side of a line in a given metropolitan region.

The economic and educational lifeblood of the reptile industry is its trade shows, of which there are literally hundreds all across the country each year. They provide opportunities for breeders and companies in affiliated industries to buy, sell and trade their goods. Trade shows are also open to the public and are accompanied by educational programs. The economic, social, and educational benefits will all be lost if the proposed rule is adopted, as interstate travel from pet owners and breeders, and transportation of reptiles in interstate commerce are involved.

Furthermore, if an owner were to become unable to care for his animal, it is unclear what recourse that owner would have if the proposed rule is implemented as written. The most practical and desirable option—selling the snake to a new owner—would now be restricted, and that owner would be forced to run afoul of the law under any scenario. USARK condemns any actions that are harmful to snakes, both in captivity and the wild, and as such has developed programs of responsible ownership with the Association of Fish and Wildlife Agencies, individual states, and others to help avert purposeful or accidental release. Nonetheless, it would be willful blindness to ignore human nature that will lead some to release or their pets or treat them in similarly inhumane ways if interstate transportation and commerce are forbidden. The Service must provide a reasonable alternative to allow responsible pet ownership.

\* \* \* \* \*

In closing, we reiterate our request that FWS, if it decides to list the black pinesnake, either exclude captive snakes from the listing or issue a 4(d) rule to allow the pet trade to continue. USARK appreciates your close attention to these important matters. If you have any questions about the analysis contained herein, or would like to discuss these matters in greater detail, we can be reached at (202) 342-8673.

---

<sup>31</sup> 15 U.S.C. § 1531(b).





Sincerely,

/s/ Phil Goss

Phil Goss, President, USARK

Anne Hawkins

Joan Galvin

*Counsel for the United States Association of  
Reptile Keepers*