

**DEFENDERS OF WILDLIFE • AMERICAN LITTORAL SOCIETY •
AMERICAN BIRD CONSERVANCY • DELAWARE AUDUBON • DELAWARE
NATURE SOCIETY • DELAWARE RIVERKEEPER NETWORK • NATIONAL
AUDUBON SOCIETY • NEW JERSEY AUDUBON SOCIETY • CITIZENS
CAMPAIGN FOR THE ENVIRONMENT**

February 27, 2008

By Certified Mail/Return Receipt Requested

The Honorable Dirk Kempthorne
Secretary
U.S. Department of the Interior
1849 C Street NW
Washington, DC 20240

Mr. H. Dale Hall
Director
U.S. Fish & Wildlife Service
1849 C Street NW
Washington, DC 20240

RE: Renewed Emergency Petition to List the Red Knot (*Calidris canutus rufa*); Petition to list the United States population of Red Knots (*Calidris canutus rufa*) and (*Calidris canutus roselaari*) as Endangered Species under the Endangered Species Act

Dear Secretary Kempthorne and Director Hall:

Defenders of Wildlife, American Bird Conservancy, American Littoral Society, Delaware Audubon, Delaware Riverkeeper, National Audubon Society, New Jersey Audubon Society, Delaware Nature Society, and Citizens Campaign for the Environment hereby petition the Department of the Interior to use its emergency authorities pursuant to section 4(b)(7) of the Endangered Species Act (ESA), 16 U.S.C. § 1533(b)(7), to list as “endangered” the *rufa* subspecies of the Red Knot (*Calidris canutus rufa*). Secondly, we petition the Department, pursuant to ESA section 4(b)(3), 16 U.S.C. § 1533(b)(3), to list as endangered a broader taxon comprising both the *rufa* subspecies and the *roselaari* subspecies (*Calidris canutus roselaari*). We also petition the Department, pursuant to ESA section 4(a)(3), 16 U.S.C. § 1533(a)(3), to designate critical habitat for Red Knots.

These petitions are filed under 5 U.S.C. § 553(e), 16 U.S.C. § 1533(b)(3) and 50 C.F.R. § 424.19 (1987), which give interested persons the right to petition for issuance of a rule. Because the Red Knot *rufa* is listed as a candidate species, having already received a finding of “warranted but precluded” from the U.S. Fish and Wildlife Service (FWS), *see* 71 Fed. Reg. 53,755 (Sept. 12, 2006), petitioners specifically invoke the language of the ESA requiring that the Secretary shall

monitor effectively the status of all species with respect to which a finding is made under subparagraph (B)(iii) and shall make prompt use of the authority under [16 U.S.C. § 1533(b)(7)] to prevent a significant risk to the well being of any such species.

16 U.S.C. § 1533(b)(3)(C)(iii).

Red Knot populations in America are in danger of extinction throughout all or a significant portion of their range. New evidence since our original emergency listing petition was rejected demonstrates conclusively that a significant risk to the well being of the species exists and warrants emergency listing for the *rufa* subspecies and consideration of a combined listing for *rufa* and *roseaari*. We submit for your consideration the attached report – Niles *et al.* 2008 – authored by the world’s leading shorebird biologists, which establishes the basis for this renewed emergency listing petition.

The Red Knot *Rufa*

A. Background

Defenders of Wildlife *et al.* and Delaware Riverkeeper *et al.* first petitioned the FWS for an emergency listing for the *rufa* subspecies on July 28, 2005 and August 2, 2005, respectively, based on the alarming decline in red knot populations observed by researchers at that time. Both petitions presented the FWS with a wealth of information on the plight of this remarkable shorebird. The FWS also commissioned a status review of the species from leading shorebird scientists that was released in 2006 and confirmed the Red Knot *rufa*’s precipitous decline.

On December 22, 2005, the FWS denied the petitioners’ request to list the *rufa* subspecies on an emergency basis and declined to issue a formal 90-day finding as required by the ESA. The FWS eventually issued a 12-month finding on the petition through its 2006 Candidate Notice of Review (CNOR). 71 Fed. Reg. 53755 (Sept. 12, 2006). The FWS specifically stated that “the threats, in particular the modification of habitat through harvesting of horseshoe crabs to such an extent that it puts the viability of the knot at substantial risk, are of a high magnitude.” *Id.* The FWS concluded that the substantial risks did not warrant listing, however, because the risks were “nonimminent because of reductions and restrictions on harvesting horseshoe crabs.” *Id.* at 53,759. The *rufa* subspecies was assigned a listing priority number of 6 and categorized as “warranted but precluded” by species with higher conservation priority.

The 2007 CNOR detailed continued declines in Red Knot populations and discussed efforts by the Atlantic States Fisheries Commission and the states of New Jersey and Delaware to reduce horseshoe crab harvesting. 72 Fed. Reg. 69,034 (Dec. 6, 2007). The FWS concluded, again, “that the major threat, the modification of habitat through harvesting of horseshoe crabs to such an extent that it puts the viability of the knot at substantial risk, is of a high magnitude, but is nonimminent because of reductions and restrictions on harvesting horseshoe crabs. Based on nonimminent threats of a high magnitude, we retain an LPN [listing priority number] of 6 for this subspecies.” *Id.* at 69,059.

B. New Information

According to a February 2008 report authored by Lawrence J. Niles, *et al.* (attached), all three wintering populations of *rufa* are now substantially lower than they were stated to be in the recent *Status of the Red Knot*, *Calidris canutus rufa*, *in the Western Hemisphere* (Niles *et al.* 2007):

- The main wintering population of *rufa* in Tierra del Fuego has declined by 15% from around 17,316 in 2006/7 to 14,800 in 2007/8. This is at least partly the result of mortality of approximately 1,300 birds that occurred during northward migration in April 2007.
- The wintering population of a 300 km stretch of the west coast of Florida was estimated at about 10,000 in the 1980s but declined to 2,500 in 2005/6 and only 550 in 2007/8. The population of the remainder of the SE coast of the U.S. has not been surveyed since 2005 so its recent trend is unknown.
- The population wintering in Maranhão, Brazil, was 7,575 in February 2005, but had dropped to about 3,000 in late 2006.

A new analysis of the weights of Red Knots caught in Delaware Bay during the spring stopover indicates that all but the earliest arrivals (roughly seventy-five percent of the entire stopover population) have suffered significantly reduced rates of mass gain on account of reduced quantities of their main food, horseshoe crab eggs. Moreover, the population of horseshoe crabs in Delaware Bay and the densities of their eggs on Bay beaches was relatively stable over 2005-2007, indicating that regulation of the crab harvest to date has been insufficient to achieve the major increase in the crab population and egg density needed to sustain the shorebird stopover.

This information is startling and demonstrates how truly imperiled this subspecies is. Accordingly, the report's authors specifically "recommend that the U.S. Fish and Wildlife Service reconsider its decision not to list *rufa* under the Endangered Species Act in view of the fact that all three wintering populations have since shown further significant decline." (Niles *et al.* 2008). Petitioners thus urge immediate consideration of emergency listing for the *rufa* subspecies. We also note that Canada's Committee on the Status of Endangered Wildlife recommended listing the *rufa* subspecies as endangered in April 2007.¹

Listing is also warranted because state and federal agency efforts have failed adequately to stem the Red Knot's decline and preserve foraging habitat on the Delaware Bay. Delaware's efforts to restrict horseshoe crab harvests were met with legal challenges and ultimately invalidated by the courts. Additionally, a New Jersey two-year moratorium prohibiting the harvest of horseshoe crabs expired in 2007 and a new proposal by the New Jersey Department of Environmental Protection was recently vetoed by the state fisheries council. As such, existing regulatory mechanisms are inadequate to conserve horseshoe crabs and their eggs in a manner that will protect this essential food source for Red Knots.

Shorebird scientists thus also recommend "that the Atlantic States Marine Fisheries Commission and the individual states involved further restrict[] the harvest of adult crabs until such time as there is unequivocal evidence of a strong recovery in the number of spawning crabs and the density of their eggs towards the levels of the early 1990s." *Id.* The

¹ See Environment Canada, Species at Risk at http://www.speciestrisk.gc.ca/search/speciesDetails_e.cfm?SpeciesID=980.

FWS sits on the Atlantic States Marine Fisheries Commission but to date has failed to use its influence to advocate for additional restriction on horseshoe crab harvesting. Petitioners also call upon the FWS to urge further restrictions on horseshoe crab harvesting as recommended by the leading shorebird scientists.

The Red Knot *Roselaari*

Petitioners submit additional information related to the Red Knot *roselaari*. Although uncertainty remains as to the extent of the subspecies' decline, new information demonstrates that populations of *roselaari* are also extremely small totaling fewer than 10,000 birds. (Niles *et al.* 2008). Such a small population places *roselaari* at high risk of extinction due to its inability at that level to withstand significant fluctuations or catastrophic population-altering events. *Id*

The 2007 status review discussed *roselaari* and indicated that knots wintering in Tierra del Fuego were *rufa* while those wintering in Florida and Maranhão (Brazil) were either *rufa* or *roselaari*. That report assumed the knots that winter in the southeastern United States were *roselaari* but, in fact, new evidence suggests there is no genetic distinction among knots from the wintering populations of the southeast U.S., Maranhão and Tierra del Fuego. *Id*

Shorebird biologists recommend “that the Service considers listing *roselaari* in view of the fact that its population is small (probably <10,000) and therefore vulnerable.” (Niles *et al.* 2008). Canada’s Committee on the Status of Endangered Wildlife recommended listing the *roselaari* as threatened in April 2007.² Petitioners request, therefore, that the FWS list both the Red Knot *rufa* and *roselaari* throughout its range.

We note that the FWS in past listing decisions has considered national listings to be a species-level taxon notwithstanding the existence of additional subspecies that may inhabit other continents. Given the potential overlap of *rufa* and *roselaari* populations within the southeastern United States, petitioners also call for a national listing based on similarity of appearance, pursuant to ESA section 4(e), 16 U.S.C. § 1533(e). Finally, petitioners note that the 2006 and 2007 CNORs for the Red Knot *rufa* fail to discuss the impacts of global warming on shorebirds or account for the potential destruction of habitat due to sea level rise and other factors. In light of the potentially dramatic impact that global warming is thought to play on migratory wildlife and their divergent habitats, FWS must consider this factor as well in its analysis of these listings.

Our request for consideration of listing at a broader taxonomic level is a new petition requiring specific findings from FWS in compliance with the ESA. Under the ESA, the Secretary of the Interior has a mandatory duty to determine within 90 days, to the maximum extent practicable, whether a petition “presents substantial scientific or commercial information indicating that the petitioned action may be warranted.” 16 U.S.C. § 1533(b)(3)(A); 50 C.F.R. § 424.14(b)(1). If the Secretary makes a positive 90-day finding, he then must publish the finding in the Federal Register and commence a “status review” of the species. 16 U.S.C. § 1533(b)(3)(A). The Secretary then must complete this review within 12-

²See Environment Canada, Species at Risk at http://www.speciesatrisk.gc.ca/search/speciesDetails_e.cfm?SpeciesID=982.

months of receipt of the petition and determine whether a proposal to list the species is warranted, not warranted, or warranted but precluded by higher priority listings. 16 U.S.C. § 1533(b)(3)(B); 50 C.F.R. § 424.14(b)(3). Within one year of the publication of a proposed rule to list a species, the Secretary must issue a final decision on the proposal. 16 U.S.C. § 1533(b)(6)(A). The Secretary must also designate critical habitat to the maximum extent prudent and determinable. 16 U.S.C. § 1533(a)(3) & (b)(6)(C).

We trust and expect that the Secretary will comply with these statutory deadlines.

Conclusion

Since the publication of the 2006 CNOR, all three of the main wintering populations of the red knot *rufa* have shown significant further declines, deepening the alarming trend that gave rise to petitioners' 2005 petitions. Even more alarming, the latest research indicates that the *rufa*'s decline continues to track closely a well-established extinction curve (Baker *et al.* 2004) that places the bird at risk of imminent extinction. New evidence suggests that *roseolaari* is also vulnerable to sudden and imminent extinction.

Regulation of the horseshoe crab harvest to date has been insufficient to achieve the major increase in the crab population needed to sustain the shorebird stopover. Protection efforts to date have failed to address site-specific threats to the Red Knot (i.e. habitat loss and availability of food at Delaware Bay) and have not led to the development and implementation of conservation and management strategies on the multi-state regional scale that are necessary for the preservation of the species.

In sum, scientific data on the Red Knot is abundant and numerous studies now provide indisputable evidence of the precipice on which the Red Knot now sits. The "best scientific or commercial data available" in this case clearly supports emergency listing. Indeed, rarely is available data as abundant and authoritative as it is with respect to the Red Knot. And management efforts to date have failed to turn the tide.

Petitioners thus urge emergency listing for *rufa* and new consideration of listing for Red Knots in the United States, including *roseolaari*. Failure to take these actions may result in petitioners filing suit to compel such action.

Thank you for your consideration of this emergency listing petition. We look forward to your prompt response.

Sincerely yours,

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Defenders of Wildlife

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Citizens Campaign for the Environment

Enclosures

cc:

The Hon. Barbara Boxer, Chair, Senate Environment and Public Works Committee
The Hon. Joseph Lieberman, Chair, Private Sector & Consumer Solutions to Global
Warming & Wildlife Protection
The Hon. Nick J. Rahall II, Chair, House Natural Resources Committee
The Hon. Madeleine Bordallo, Chair, House Subcomm. on Fisheries, Wildlife & Oceans
The Hon. Joseph Biden (D-DE)
The Hon. Thomas Carper (D-DE)
The Hon. Michael Castle (R-DE)
The Hon. Frank Lautenberg (D-NJ)
The Hon. Robert Menendez (D-NJ)
The Hon. Robert Andrews (D-NJ)
The Hon. Frank LoBiondo (D-NJ)
The Hon. Jim Saxton (D-NJ)
The Hon. Christopher Smith (D-NJ)
The Hon. Frank Pallone (D-NJ)