



May 1, 2014

Public Comments Processing, Attn: FWS-R5-ES-2013-0097
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
4401 N. Fairfax Drive, Suite 222
Arlington, Virginia 22203

Delaware Bay is critical habitat to more than 400 species of birds and migrating shorebirds. Each spring, at least 11 species of birds, including the Red Knot, stop over on the Delaware Bayshore to feed on the eggs of the Horseshoe Crab and thereby fuel their annual spring migration.

In 1982, 95,530 Red Knot were counted on the shores of the Delaware Bay. In 2009 only about 24,000 were observed. In 2011 and 2010 the counts dropped to less than 15,000. In 2012 we were at 25,458 and in 2013 at 25,596. The counts continue at such a fatally low level that DRN and shorebird experts believe Endangered status is more than warranted at this time and frankly overdue, and Threatened is the bare minimum we need to attempt to protect the species from extinction.

The FWS should also consider the science available to realize the dire situation of the red knot. New estimates of Delaware Bay stopover population size, based on capture-recapture methods (i.e. resightings of marked red knots), must be weighed against the lack of this type of estimate at the peak of red knot abundances in the 1980's and early 1990's. Estimates of abundance from both the Delaware Bay stopover and Patagonian wintering areas were made through aerial surveys and represent a minimum population estimate. Thus, estimates based on capture-recapture methods are not comparable to earlier estimates. If capture recapture estimates were available in the mid-1980's and early 1990's, red knot abundance estimates would have been considerably higher. The primary assessment of red knot numbers must be based on a comparison of observed numbers in Patagonia, the primary wintering area for red knots, and the observed number in Delaware Bay, the primary stopover. In both places, the listing proposal summary correctly reports that red knot numbers in both locations have not recovered. Patagonian numbers remain at their lowest, and Delaware show a slight increase that has yet to be determined as persistent. (Larry Niles, correspondence, 11/8/13).

The arrival, feasting and migration of the shorebirds supports a multi-million dollar ecotourism industry. Birding and outdoor enthusiasts from all over the world flock to the Delaware Bayshore to watch the spectacular feeding frenzy. During their visit they buy recreational-related goods and services, stay in the region's hotels, and visit parks and patronize restaurants and local shops. According to one report, Horseshoe Crab dependent ecotourism generates between approximately \$7

DELAWARE RIVERKEEPER NETWORK
925 Canal Street, Suite 3701
Bristol, PA 19007
Office: (215) 369-1188
fax: (215) 369-1181
drm@delawareriverkeeper.org
www.delawareriverkeeper.org

million and \$10 million of spending in Cape May, New Jersey alone, and creates 120 to 180 related jobs providing an additional \$3 million to \$4 million in social welfare value. According to a New Jersey Department of Fish and Wildlife report, the economic value of the Horseshoe Crab and migratory bird phenomenon seasonally for the Delaware Bayshore area is over \$11.8 million with over \$15 million of economic value generated if other beneficiaries beyond New Jersey are included. Annually, it provides \$25 million in benefits to the Delaware Bayshore region and \$34 million regionally. Because most of these expenditures occur in the “off-season”, it is particularly valuable to local economies.

The continuing existence of the Horseshoe Crab and migrating shorebird phenomenon are vital for the related ecotourism industry. Of those surveyed, only 6.6% said that the Horseshoe Crab and shorebird phenomenon was unimportant to their visitor satisfaction. On average those surveyed said they would be willing to pay as much as \$212.45 (in decreased annual household income) annually for a program to protect these resources; and that they would “be willing to tolerate no more than 50.7% decline in Horseshoe Crabs and migrant shorebirds before they would cease visiting the Delaware Bay shore area.”

Protecting the red knot and giving it a listing of Endangered will also assist with other ailing species that are critical to the Delaware Bay ecosystem and beyond. As of 2012, the numbers of horseshoe crabs counted on both the Atlantic coast benthic trawl, conducted by Virginia Tech, and the spawning crab survey, conducted by states of DE and NJ, have shown no indication of recovery since the inception of these surveys in 2001 and 1999, respectively. The count of horseshoe crab surface eggs, a relative measure of foraging conditions for shorebirds, has also shown no sign of recovery. Taken together these data portend an unsuitable condition for red knot recovery without a change in status. The threatened status of the red knot is substantiated by the similar decline found in a long list of other arctic-nesting shorebirds, including other species that come to Delaware Bay, such as the ruddy turnstone, semi-palmated sandpiper and sanderling. All of these birds use different habitats and foods during most of their year, but all rely on horseshoe crabs eggs in the spring stopover period. Listing the red knot and creating the basis for recovery will improve the situation for all of these shorebirds. As long as the Delaware Bay stopover remains unrecovered, the threats in other places will have greater impacts than is likely if the bay were recovered. (L. Niles, Correspondence 11/8/13).

I write to urge you to list the red knot *rufa* (*Calidris canutus rufa*) as an endangered species. While I understand you have proposed to list the species as Threatened, I believe the strong protections given by the Endangered designation are well warranted by the science and long overdue. At a minimum, Threatened status should be granted to the Red Knot, but I hope you will take the step of providing a listing as Endangered in order to ensure the needed high level protections at this critical time.

Respectfully,



Maya K. van Rossum, the Delaware Riverkeeper
Faith Zerbe, Monitoring Director for the Delaware Riverkeeper Network