



## ***Brown Pelican Proposed Delisting Questions and Answers***

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### **When was the brown pelican placed on the Endangered Species List?**

The brown pelican (*Pelecanus occidentalis*) was listed as endangered throughout its U.S. range on October 13, 1970, and in its foreign range on June 2, 1970, because of sharp population declines, the threat of further declines from pesticide-contaminated food supplies, and the uncertain status of the species in other areas where pesticide contamination was expected.

### **What is the current listing status of the brown pelican?**

In 1985, brown pelicans along the Atlantic Coast states of Florida, Georgia, South Carolina and Alabama's Gulf Shore had recovered to the point where they were removed from the Endangered Species List. Currently, the brown pelican is listed as endangered where it occurs in the rest of the United States and in Puerto Rico, the U.S. Virgin Islands, Mexico, Central and South America, and the West Indies.

### **What caused its decline?**

Widespread organochlorine pesticide pollution was the major factor in the decline of the brown pelican. The pesticide DDT (dichlorodiphenyltrichloroethane) and its principal metabolite DDE (dichlorodiphenyldichloroethylene) are not easily broken down. They accumulate in the tissues of species at the top of the food chain, such as the brown pelican, bald eagle and peregrine falcon. DDE interferes with calcium deposition during eggshell formation, resulting in thin-shelled eggs that are easily broken during incubation. The results of this effect can be so pronounced they lead to widespread reproductive failures. Other organochlorine pesticides, such as endrin and dieldrin, are so toxic that they kill brown pelicans following exposure in some areas.

### **What major factors lead to the comeback of the brown pelican?**

In 1972, the Environmental Protection Agency banned the use of DDT in the United States as well as the use of pesticides such as endrin and dieldrin. As a result, the levels of these persistent compounds in the environment have decreased in most areas, thus the reproductive success of brown pelicans has increased. While localized threats to populations throughout the range remain, they are at such low levels that the species is not expected to become threatened or endangered with extinction throughout a significant portion of their range in the foreseeable future.

### **What has been done to recover the brown pelican?**

This species has recovered in large part due to the banning of DDT, an organochlorine pesticide, in the United States (U.S.) which resulted in improved reproductive success. Additionally, enhancement and recovery activities and the protection of nesting islands

within the U.S., Mexico, and some Central and South American countries since the species was listed have also contributed to the recovery of the brown pelican.

In 1968, the Louisiana Department of Wildlife and Fisheries and Florida Game and the Fresh Water Fish Commission jointly implemented a restoration project. A total of 1,276 young pelicans were captured at sites in Florida and released at three sites in southeastern Louisiana during the 13 years of the project. The Texas Parks and Wildlife Department monitored nesting sites along the coast. The protections provided by the Endangered Species Act and the extraordinary efforts of State wildlife agencies, Federal agencies, universities, private ornithological groups and individuals working in partnership with the Service accelerated the pace of recovery through reintroduction efforts and the protection of nest sites during the breeding season.

**Comment [K1]:** Can we add what purpose the TX monitoring was done for? Also in terms of the overall outreach approach, do we need to include what CA has done, mention activities for western birds?

### **What is the global population estimate for the listed brown pelican?**

Conservative assumptions were used in tabulating data in order to estimate the global population size of the brown pelican. This total, or global estimate, is for the listed brown pelican, which does not include the Atlantic coast of the U.S., Florida, and Alabama. The total, based on regional estimates, is over 620,000 individuals, which includes an estimated 400,000 pelicans from Peru. For further explanation of how this estimate was determined, please see the five-year review that was completed for the brown pelican.

### **How does the Service determine whether to delist a species?**

The Endangered Species Act (ESA) requires all species on the Federal list of threatened and endangered species to undergo a periodic status review to determine whether a reclassification is appropriate. Although the ESA and other processes require us to assess the status of all listed species periodically, our practice is to monitor the status of listed species on a continual basis. Other new information, data, or corrections including but not limited to changes in taxonomy or nomenclature, identification of erroneous information contained in the List of Endangered and Threatened Wildlife and Plants; and improved analytical methods also aid in making such a determination. According to the Endangered Species Act, a species may be delisted if the best scientific and commercial data available substantiate that the species is extinct; neither endangered nor threatened, due to its recovery, or if the original data were in error.

### **What is the process for delisting of a species?**

The first step towards delisting a species is for the Service to publish a proposed rule in the Federal Register. Once proposed, the Service seeks public comment and conducts peer review on its proposed action. In the case of the brown pelican, the Service is proposing to remove a regulation by delisting the total pelican population from the List of Endangered and Threatened Wildlife. When the comment period on this proposed action closes, the Service will then review and analyze the comments received and make a final determination, which may differ from the proposed action if information received during the comment period justifies such an outcome. If the Service determines that delisting is appropriate, that determination will be published as a final rule in the Federal Register. Upon publication of a final rule, the delisting of the brown pelican would become effective in 30-days. Prior to that time, the brown pelican throughout its listed range, which does not include the Atlantic coast, Florida, or

Alabama, is still considered a listed species with the full protection of the Act.

**What protection is given a species like the pelican following delisting?**

The take of all migratory birds, including the brown pelican, is governed by the Migratory Bird Treaty Act (MBTA) and the corresponding regulations codified in 50 CFR Part 21. Brown pelicans will still be protected by the MBTA, which governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. Provisions within the MBTA allow for the taking and use of migratory birds, but require that such use not adversely affect populations. The MBTA and its implementing regulations (50 CFR Parts 20 and 21) will adequately protect against over utilization of brown pelicans. Further protection is given to the brown pelican through the Lacey Act, which helps the United States and foreign countries enforce their wildlife conservation laws, including the protections afforded brown pelicans under MBTA. In addition to these laws that provide direct protection to the brown pelicans, the Clean Water Act and the Federal Insecticide, Fungicide, and Rodenticide Act of 1996 (FIFRA; 7 U.S.C. 136 et seq.) provide regulations indirectly contributing to habitat protections. The Service believes that these protections, taken together, provide adequate regulatory mechanisms to prevent the brown pelican from becoming threatened or endangered throughout all or a significant portion of its range in the foreseeable future.

**How many brown pelican subspecies are there?**

Although the brown pelican is listed as a single entity, it is recognized as consisting of six subspecies. Recognition of brown pelican subspecies are based largely on relative size and color of plumage and soft parts (for example the bill, legs, and feet). Taxonomy of the brown pelican subspecies has not been critically reviewed for many years and the classification followed by the American Ornithological Union is based on a 1945 review, which itself was based on few specimens from a limited portion of the range. This proposed delisting rule applies to all brown pelican subspecies. The brown pelican is easily distinguished from the American white pelican, the only other pelican in its range, which is white with black primary and secondary flight feathers.

**Where can one see brown pelicans?**

The brown pelican occurs primarily in coastal, marine, and estuarine (where fresh and salt water intermingle) environments. Its range is from the Chesapeake Bay to Florida and west along the coast of the Gulf of Mexico from Mississippi to Texas; along the Pacific Coast from British Columbia, Canada, south through Mexico into Central and South America; and the West Indies, but is occasionally sighted throughout the U.S.

**What is the life cycle of the brown pelican?**

The webbed-footed pelican is a strong, graceful flyer. It nests on small isolated islands where it is safe from predators such as raccoons and coyotes. Nesting habitats range from mud banks to mangroves and other woody vegetation. It usually lays two to three eggs. The young hatch in about 30 days. The featherless chicks are born sightless and are initially completely dependent upon their parents for food and protection. Until the chicks grow a coat of down, they must be protected from the sun – such exposure could prove fatal. They are fed by both parents, consuming up to 150 pounds of fish during nine weeks of growth. Brown pelicans are long lived: a banded bird was found to have been tagged more than 30 years earlier.

**How do brown pelicans feed?**

A feeding pelican soars over the water searching for surface-schooling fish. Once spotted the bird rotates into a dramatic dive and plunges from 30 to 60 feet bill-first into the water. Hitting the water with a force that would stun an ordinary bird, the brown pelican's impact is cushioned by air sacs that lie beneath the skin and inflate on contact. The loose skin on the underside of the bill extends to form a scoop net with a 2.5-gallon capacity. The pelican squeezes the water out and throws its head back to swallow the fish. Mullet and menhaden are the favored food of the brown pelican along with northern anchovies, Pacific sardines and other small fish.

**What do their nesting sites look like?**

Along the Pacific Coast of California south to Baja California and in the Gulf of California, brown pelicans nest on dry, rocky substrates, typically on off-shore islands. Along the Gulf Coast of the U.S., brown pelicans mainly nest on coastal islands, and they will use mangrove trees, if available. In some areas of the West Indies, along the Pacific Coast of Mexico, and South and Central America, mangroves are used as nesting habitat. Tropical thorn and humid forests also provide nesting habitat for brown pelicans in southern Mexico, Central America, and the West Indies. Nests are built on the ground when vegetation is not available, but when built in trees, they are about six to 40 feet above the water surface.