Plain Pigeon

Description
The Puerto Rican plain pigeon is a bird similarly-sized to the common dove. At a distance, it appears as a light blue-gray bird, but on closer inspection, it has a light gray-blue body with grayish brown wings, and the head, neck, breast and wings have a mauve tint. When perched, its wings show a fine, white band. The beak is gray with a black tip, and the legs are deep red. The eyes are light grayish blue. Although the females are slightly smaller than males, it is almost impossible to tell the sexes apart out in the wild. Juveniles are similar to adults, although they are browner than gray, and have dark eyes. There are three subspecies of plain pigeon in the Caribbean: the *Patagioenas inornata inornata* from Cuba and Hispaniola, the *P. i. exigua* from Jamaica, and the *P. i. wetmorei* from Puerto Rico.

Biological Information

Reproduction
The plain pigeon reaches sexual maturity at around the first year of age. The species is monogamous.

Reproduction
Both members in the pair work in building the nest, where the female lays a single egg, which is incubated by both parents for a period of approximately 18 days. After hatching, the chick is fed by both parents for approximately three weeks (22 to 24 days). At the end of this period, the juvenile abandons the nest. A breeding pair can produce three clutches per year, with a success rate oscillating between 42% and 48%. The plain pigeon nests throughout the entire year. However, there is a peak in nesting numbers from April through June.

Habitat
The plain pigeon is a generalist species – it can thrive in different habitats, but usually behaves as a border species, nesting, foraging and sleeping in trees along the sides of roads, rivers and creeks. The species can also be observed in secondary forests (forests that have re-grown after the primary vegetation was impacted by a major disturbance) or moving across agricultural and urban developments in its search for food or resting areas. This species’ nests have only been found in east-central Puerto Rico (e.g. San Lorenzo, Caguas, Cidra, Comerío) and almost always near bodies of water such as creeks or small streams. The plain pigeon uses large, leafy trees, like the mango tree, for nesting. It also likes the bamboo clusters near the water.

Diet
A wide variety of plants provide food for this bird species. For example, the royal palm (*Roystonea borinquena*), day-blooming jasmine (*Cestrum diurnum*), camasey (*Miconia sp.*), péndula (*Petitia dominguensis*) and princess vine (*Cissus sycyiodes*). The plain pigeon ingests water accumulated in bromeliads’ leaves and in the flowers of the African tulip tree (*Spathodea campanulata*).
**Distribution**
Historically, the plain pigeon was abundant in Puerto Rico. It could be found anywhere between the Lares-Utuado region through the eastern mountainous area of Puerto Rico. It has also been documented in the following municipalities: Aguadilla, Cabo Rojo, Camuy, Guayama, Luquillo, Mayagüez, Corozal, Morovis, Orocovis, Ponce, Utuado, Vega Alta and Vieques. Unfortunately, the species has been reduced to only a few small populations in east-central Puerto Rico (Cidra, Cayey, Caguas, Comerio, Aibonito, Aguas Buenas, Gurabo, and San Lorenzo). By 1940, the plain pigeon was believed to be extinct until a small population of 52 individuals was found in Cidra in 1963. In recent years, the plain pigeon has been moving towards the mountain forests bordered by agricultural land in the karst region (Corozal, Morovis and Florida). In 2012, the plain pigeon population was estimated at 1669 individuals.

**Threats**
The plain pigeon faces several threats. Some threats are anthropogenic (man-made), while others are natural.

The natural threats include:
- External (parasitic flies such as *Philornis pici*) and internal (Trematodes *Tanaisia bragai*) parasites, as well as other pathogens – these cause infections that often kill hatchlings
- Natural events (hurricanes and tropical storms) – After these events, the birds lose habitat and food sources.
- Competition with other species like the scaly-naped pigeon (*Patagioenas squamosa*) – Competition for suitable nesting habitats and food sources.
- Depredation from other species such as: birds (ej. pearly-eyed thrasher *Margarops fuscatus*, red-tailed hawk *Buteo jamaicensis*, red-legged thrush *Turdus plumbeus*), yellow- and black-crowned night herons (*Nyctanassa violacea* and *Nycticorax nycticorax*), green heron (*Butorides virescens*), domestic cats (*Felis domesticus*) and rats (*Rattus rattus*).

Some human activities also pose threats to this species. For example:
- Habitat destruction and modification due to construction, expansion and maintenance of roads, as well as habitat destruction for agricultural, residential or touristic use.
- Poaching, disturbances that impact nesting areas (such as tree-trimming), harassing nesting pairs, and stealing of hatchling.

**Conservation Measures**
The plain pigeon was included in the Endangered Species list in 1970. The U.S. Fish and Wildlife Service, the Department of Natural and Environmental Resources (PRDNER), and the University of Puerto Rico at Humacao implemented a captive breeding program for the plain pigeon in 1983. A total of 31 captive-bred individuals were released between 1993 and 1995 in Cidra. The captive breeding program was discontinued near the end of the 90s, when an increase in natural plain pigeon population was measured.

The Endangered Species Act of 1973, amended, prohibits the killing, harassing, trapping, purchasing or selling any species, as well as parts and products derived from the species.

**Additional Recommendations**
Research on this species must continue. This will help determine important aspects regarding the populations’ behavior and dispersion, and determine the effects the predators have on them, among other topics. It is also important to work with private land-owners on the implementation of conservation measures that result in restoration and protection of habitat for the species, and thus, increase plain pigeon populations.

**References**

