

# Pied Imperial Pigeon



Kingdom: Animalia  
Phylum: Chordata  
Subphylum: Vertebrata  
Class: Aves  
Order: Columbiformes  
Family: Columbidae  
Genus: *Ducula*  
Species: *bicolor*



Photo courtesy of Karen Marzynski

## Habitat

- **In the Wild:** The pied imperial pigeon prefers coastal habitats found in New Guinea, Thailand, and other small coastal island forests, mangroves, and coconut plantations of Southeast Asia.
- **Exhibit Location:** Zoo to You Collection; Diversity of Birds

## Characteristics

- Length: about 37 cm (14.6 inches); Wingspan: about 45 cm (17.7 inches); Weight: 365-510 g (0.8-1.1 pounds)
- The pied imperial pigeon is white to a pale cream color with bluish-black flight and tail feathers. It has a slender build and there is no difference in appearance between male and female birds. The legs and bill are a bluish color and the iris of the eye is brown.
- **Lifespan: In the Wild** unknown; **In Captivity** up to 20 years

## Behaviors

- Pied imperial pigeons travel in flocks at dusk and dawn and are migratory birds. They are among the most powerful and agile flyers in the bird world and their flight muscles are relatively larger than in most bird groups. This allows them to cross large bodies of water to different islands.
- They are relatively sedentary, feeding on fruit directly from trees. They take a fruit or nut with the bill and remove it from the stem with a twisting head movement.
- Their call is a deep “coo woo.” Their vocalizations are used to advertise territory, gain the attention of a mate, signal danger, make contact, show aggression, and locate food sources.
- Feather maintenance is very important. They preen (fix their feathers with their beaks), have powder downs (rather than an oily base from a gland), and do rain-bathing to keep their feathers in optimal condition. Rain-bathing has a very distinct posture. The bird crouches against substrate, and then tilts its body to the side, with the wing on the down side slightly folded and tucked under the body. The other wing is spread and raised over the back to expose the feathers of the wing’s underside. After a few minutes, it changes sides.
- **Enrichments at the Zoo:** plastic bird toys, daily handling, pine cones

## Reproduction

- Pied imperial pigeons form monogamous pair-bonds, at least for the duration of a particular breeding season. They breed from December–March, in large colonies on offshore islands. The male displays by inflating his neck and breast feathers and flattening his beak against his chest while hopping in place and slightly flipping his wings.
- They breed on small islands off the coast of Thailand, but make daily trips to the mainland while they forage for food in mangroves, coastal woodlands, and plantations. A loose stick nest is made in a coconut palm constructed a distance above the ground.
- Incubation lasts 23-25 days and the chicks fledge (leave the nest) after another 3 weeks. Usually 1 and rarely 2 eggs are laid, with both adults sharing nesting duties and rearing of the young.

## Diet

- **In the Wild:** fruits and berries, including wild figs and large fruits of the wild nutmeg

- **At the Zoo:** fruits, berries, pigeon pellets, paradise pellets

### **Conservation Status**

- **IUCN status:** not listed; **CITES Appendix:** not listed
- It is not globally threatened and is still common in most of its natural historical range.
- Numbers could start declining due to excessive hunting, disturbance of nesting colonies, and habitat loss.
- Predators: humans

### **Did You Know?/Fun Facts**

- They can swallow extremely large fruits with very big seeds. The seeds are ejected after the pulp has been removed in the crop or passed through after the pulp is removed by its stomach action.

### **Sources:**

- del Hoyo, J., Elliott, A., & Sargatal, J. (Eds.). (1997). *Handbook of the birds of the world, vol. 4*. Barcelona: Lynx Edicions.
- Kansas City, Missouri, (2004). Pied imperial pigeon chick. Retrieved Aug. 09, 2004, from Kansas City, Missouri Web site: <http://www.kcmo.org/kc150.nsf/web/piedpigeon?opendocument>.