

Species Fact Sheets

Order: Struthioniformes
Scientific Name: Dromaius novaehollandiae

Family: Dromaiidae
Common Name: Emu

AZA Management: Green Yellow Red None

Photo (Male):



Photo (Female):



NATURAL HISTORY:

Geographic Range: Europe Asia North America Neotropical
 Africa Australia Other [Click here to enter text.](#)

Habitat: Forest Desert Grassland Coastal
 Riverine Montane Other [Click here to enter text.](#)

Circadian Cycle: Diurnal Crepuscular Nocturnal Other [Click here to enter text.](#)

Cold Tolerance: To 70° F To 60° F To 50° F To 40° F
 To 30° F To 20° F Other Heated sheds should be available at 30F; birds locked in at 20F or colder

Heat Tolerance: To 30° F To 50° F To 70° F To 90° F
 To 110° F Other Capable of withstanding wide range of temperatures, provided shelter from sun

Diet: Frugivore Carnivore Piscivore Insectivore
 Nectivore Omnivore Folivore Other (Add Below)

Captive Dietary Needs:

Commercial Ratite Diet, Grain, Fruits and Vegetables, Browse

Life Expectancy in the Wild: Males: 5-10 Years Females: 5-10 Years

Life Expectancy in Captivity: Males: 20 Years Females: 20 Years

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BREEDING INFORMATION:

Age at Sexual Maturity: Males: 18-20 Months Females: 18-20 Months

Courtship Displays: Male and female emus call to one another with deep “booms”, audible from hundreds of meters away. The birds will circle one another, engaging in courtship dances of bobbing and ducking around. The female will then walk a short distance away before crouching down, allowing the male to copulate with her.

Nest Site Description: Emus nest on the ground on a platform of grasses. They show a preference for nesting behind visual barriers, such as rocks or trees. The female will sometimes “guard” the male to make sure that he is incubating her eggs, not those of another female.

Clutch Size, Egg Description: In Australia, females lay their eggs April through June, whereas in North America this occurs primarily January through March. Eggs are dark green, measuring 13cm x 9cm and weighing 700-900g. The female may lay 5-15 eggs before leaving (often going to find another male to mate with – she may nest three times in a single breeding season).

Incubation Period: 48-56 Days

Fledgling Period: 3 Days

Parental Care: The male alone incubates the nest (some females stay and defend the male while he sits on the nest). He usually does not eat or drink during the incubation period, instead living off of stored fat. After the chicks hatch, the father guards them for the next 5-7 months. The chicks tend to lead the male, rather than vice-versa.

Chick Development: Newly hatched chicks are precocial and can leave the nest as early as 3 days. Chicks will often remain with the father until they are 18 months old. Chicks are covered with brown and white stripes on the body and neck, fading into adult plumage by 9-10 weeks of age. Males will adopt chicks from other broods.

CAPTIVE HABITAT INFORMATION:

Social Structure in the Wild: Often solitary, but sometimes found in pairs or small flocks. May congregate in very large flocks while traveling in search of food

Social Structure in Captivity: Pairs, Mixed-Sex or Same-Sex Groups; may be necessary to remove females if males become aggressive during incubation

Minimum Group Size: Single

Maximum Group Size: Dependent on size of enclosure

Compatible in Mixed Species Exhibits: Yes

Comments:

Emus are often kept with macropods and Australian birds, such as waterfowl and megapodes. They have been successfully housed with a variety of ungulates (camels, bison, zebra,

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various deer and antelope), both in zoo and in safari park settings

Optimal Habitat Size: 200 Square Meters, with an additional 100 Square Meters per additional emu

Management Challenges: Extremely adaptable to captive management, emus are wide-spread both in zoos and in private collections. Though they are generally considered the most docile of large ratites in captivity, male emus may still behave aggressively during the breeding and nesting season. Both sexes will also go off food during the winter/breeding season, which can make daily husbandry difficult.

ADDITIONAL COMMENTS:

The emu is the second tallest bird on earth, after the ostrich. They may stand 1.5-1.9 meters tall and weigh 30-60kg. Females tend to be slightly larger than the males; otherwise, the sexes are alike in appearance. The penis of the male is visible during defecation. They are covered in shaggy gray-brown feathers, while the sparsely feathered face and throat are a pale blue-gray. The birds are darker after molting, though sunlight later fades the feathers into a paler color. The wings are very small, capable of flapping but of no use in locomotion. Juveniles are covered with brown and cream stripes, which darken into the adult plumage after about 6 months. Adults have an aperture in their necks, between the windpipe and air sacs, which allows the birds to create their deep, booming calls. The emu is the only bird with gastrocnemius muscles located in the back of the lower legs.

Although flightless, emus are very fast runners, and can sprint up to 50km/hr. They are also good swimmers. While they are largely sedentary, emus may travel during times of drought or food-shortage. They can go for long periods of time without food or water, though they will drink copiously when given the opportunity, and can store large quantities of fat. They do not possess a crop for storing or breaking down food, but the birds' modified esophagus can store food for up to half an hour before it enters the stomach. The emu is believed to be a disperser of cactus seeds, spreading them through its feces. The dingo is the only predator of adult emus; birds defend themselves with powerful kicks. Wedge-tailed eagles and other raptors prey upon chicks.

There are three living subspecies of emu: the nominate (found in the southeast and identified by its white ruff when breeding), *D. n. woodwardi* (found in the north, it is slender and paler), and *D. n. rothschildi* (found in the southwest, it is darker, with no breeding ruff). The Tasmanian subspecies – *D. n. diemenensis* – went extinct around 1865. Two insular dwarf emus – *D. baudinianus* and *D. n. ater* – went extinct following European colonization. A population of emus was reestablished on Kangaroo Island; an attempt to establish a population on Maria Island (off the coast of Tasmania) was not successful.

Originally known as the “New Holland Cassowary”, the name “emu” is believed to be derived from one of the bird's calls (“e-moo” – females call more loudly than males). It was an important source of food for Australian aborigines, who hunted it by imitating its call. Emus have benefited from the provision of water for livestock and have increased in numbers to the point where some ranches and farmers consider them to be a nuisance. They have resisted several attempts to reduce their numbers, including the “emu wars” of the 1930's, when the Australian military was (largely unsuccessfully) sent out against the birds. Many farmers use fencing to protect their crops from emus, some of which may stretch for over 1000km. Emus in turn are farmed for their

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meat, oil, and skins, which are turned into leather.

The emu has an important role in Australian identity. It features prominently in Aboriginal mythology – in one creation myth, the sun was made by throwing emu eggs into the sky. It appears on the Coat of Arms of Australia and is the country's unofficial national bird. They show considerable tolerance for habitat disturbance, and may be found close to large cities.

REFERENCES:

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COMPLETED BY:

Name: Ian Shelley, Salisbury Zoo and Monica Halpin, Zoo Atlanta

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