Species Fact Sheets

Order:	Struthioniformes	**Family:**	Rheidae
Scientific Name:	Rhea americana	**Common Name:**	Greater Rhea

AZA Management: ☐ Green X Yellow ☐ Red ☐ None

Photo (Male):

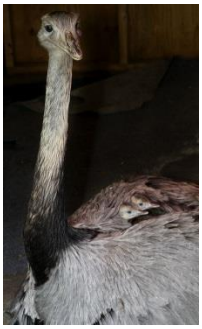

Photo (Female):

NATURAL HISTORY:

Geographic Range:	Europe	☐	Asia	☐	North America	☐	Neotropical	X	
	Africa	☐	Australia	☐	Other	South America			
Habitat:	Forest	☐	Desert	☐	Grassland	X	Coastal	☐	
	Riverine	☐	Montane	☐	Other	Click here to enter text.			
Circadian Cycle:	Diurnal	X	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 shelters should be provided at 30F. Locked in at <25F			
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	x	Folivore	☐	Other (Add Below)		

Captive Dietary Needs:
Greater rheas can be maintained on commercial ratite diet.

Life Expectancy in the Wild:	Males:	10-15 Years	Females:	10-15 Years
Life Expectancy in Captivity:	Males:	40 Years	Females:	40 Years

BREEDING INFORMATION:

Age at Sexual Maturity:	Males: 3 Years Females: 2 Years
Courtship Displays:	At the start of the breeding season, males become territorial. A male will attempt to herd females in his territory, displaying for females by running around with lowered neck and outspread wings, shaking his feathers.
Nest Site Description:	Greater rheas often nest near water. The nest is a shallow scrape on the ground lined with twigs and vegetations. All of the females in the harem lay their eggs in the nest over the course of 7-10 days.
Clutch Size, Egg Description:	The male along incubates the eggs (usually 20-30 eggs, but ranging from 10-80 eggs from as many as 12 females). Eggs are initially a golden yellow color, but by the end of the incubation period they have faded to a dull white.

Incubation Period: 35-40 Days

Fledgling Period: 1 Day

Parental Care:

The male rhea alone incubates the eggs and cares for the chicks as they hatch. Shortly after the chicks hatch, they leave the nest, remaining under the care of the male for 6-8 months. The male protects the chicks from predators and provides them with shelter under his wings if they become too hot or cold. Contact between the group is maintained through a series of whistling clicks. If a chick becomes separated from its group, it may be adopted by an unrelated male.

Females play no part in the rearing of the chicks. Females possess the ability to maintain viable sperm in their oviducts for at least 8 days (quite possibly longer). This makes it likely that many eggs are laid in the nests of birds that are not the father of the chicks that hatch from them.

Cooperative breeding has been observed between some males. In these cases, a subordinate male will assist the dominant male is defending the harem, driving off other males, and helping to incubate eggs (in these cases the eggs will be laid in two separate nests). Some of these eggs are believed to have been fertilized by the subordinate male.

Four reproductive classifications of males have been observed in the wild: non-breeders, birds that copulate but do not incubate eggs, birds that incubate eggs but do not copulate, and birds that copulate and incubate eggs.

Chick Development: Eggs hatch within 36 hours of one another, perhaps spurred along by the calls of the first hatchlings. Chicks are precocial and grow quickly.

CAPTIVE HABITAT INFORMATION:

Social Structure in the Wild: Outside of breeding season, males are solitary while the females are found in small flocks. Yearlings flock together until they are two years old. During

	the winter, rhea congregate into larger flocks, sometimes mixed with deer, guanaco, or domestic livestock
Social Structure in Captivity:	Greater rheas can be maintained either solitary [not recommended due to their social nature], as a pair, as a trio or as an all-female flock. Mulitple male flocks is not generally recommended.

Minimum Group Size:	Pair	Maximum Group Size:	See above

Compatible in Mixed Species Exhibits:	Yes	**Comments:**	Successfully mixed with variety of other species: guanaco, llama, capybara, various deer, Tapirs (Baird's and Lowland/Brazilian) and giant tortoise

Optimal Habitat Size:	If a single male is housed with a small group of females, the area should be large enough so that if breeding, incubation, and rearing occur there is sufficient space for the male to do so separately, while allowing the females sufficient area as well. 7500 ft2 for two birds is recommended, adding an additional 20% of space per each additional bird.
Management Challenges:	Males in breeding mode can be very aggressive, both to keepers and to other greater rheas (including females). Greater and lesser rhea are capable of hybridizing in captivity; birds of the two species should not be kept together in the same enclosure.

ADDITIONAL COMMENTS:

Sometimes known (incorrectly) as the “South American ostrich”, the greater rhea is the largest American bird. Rheas stand 1.5-1.7m tall with an average weight of 20-25kg. Though flightless, they often use their wings as rudders when running. Both sexes have gray-brown plumage with dark patches on the neck and upper thighs. The lower legs are bare with transverse scutes. A prominent black ring appears on the base of the neck during the breeding season. In its native range, it is known as the “nandu”, an imitation of its call.

There are five subspecies of greater rhea, distinguished by variations in size and the extent of black on the back of the neck: the nominate (N. and E. Brazil), R. a. intermedia (Uruguay and SE Brazil), R. a. nobilis (E. Paraguay), R. a. araneipes (Paraguay, Bolivia, SW Brazil), and R. a. albescens (Argentina). These subspecies are tentative, however, and there is some disagreement as to their distribution and characteristics. The greater rhea can be distinguished from his closest relative, the lesser rhea (R. pennata) by having longer legs, grayer (rather than browner) coloration, a lack of white spotting, and a lack of feathering below the tarsal joint.

Adults face predation from pumas, jaguars, and domestic dogs, whereas nests may be raided by armadillos and various mustelids. They are fast runners, reaching speeds of 60km/hr, and are also good swimmers. Male rheas can be very aggressive to potential predators of their chicks, and are notorious for charging mounted gauchos (cowboys) in the pampas. For this reason, guachos are often accompanied by packs of dogs.

Greater rheas have declined throughout their range for a variety of reasons, having disappeared completely from northeastern Brazil, where they were once common. Man made threats include roads, barbed-wire fencing, and hunting for meat, feathers, and skins. Through they are sometimes considered an agricultural

pest, rheas actually benefit farmers by feeding on pest and weed species. Commercial rearing and farming of rheas is becoming popular, which could potentially supplement wild populations in the future. A small feral population has existed in Germany since 2000.

The greater rhea is listed as Near Threatened by the IUCN. It is listed on Appendix II of CITES.

REFERENCES:

http://animaldiversity.ummz.umich.edu/accounts/Rhea_americana/

http://www.arkive.org/greater-rhea/rhea-americana/

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http://neotropical.birds.cornell.edu/portal/species/overview?p_p_spp=55956

Princeton Encylopedia of Birds. Edited by Christopher Perrins. Princeton University Press: Princeton. 2009.

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