Species Fact Sheets

Order:	Struthioniformes	**Family:**	Rheidae
Scientific Name:	*Rhea pennata*	**Common Name:**	Lesser Rhea

AZA Management: ☐ Green ☐ Yellow ☐ Red X None

Photo (Male) with juvenile chicks:

The female is generally duller in color than the male, with fewer and smaller white spots on the back

NATURAL HISTORY:

Geographic Range:	Europe	☐	Asia	☐	North America	☐	Neotropical	X	
	Africa	☐	Australia	☐	Other	Click here to enter text.			

Habitat:	Forest	☐	Desert		Grassland	X	Coastal	☐	
	Riverine	☐	Montane	☐	Other	Steppe			

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	**X**	To 20° F	☐	Other				

Supplemental shelter with heat and dry substrate should be provided when ambient temperatures fall below 30° F for sustained periods. Additionally, during inclement weather and/or precipitation rhea should have available access to shelter below 35° F as research has suggested moisture can cause a significant decrease in the insulative properties of feathers

Heat Tolerance:	To 30° F	☐	To 50° F	☐	To 70° F		To 90° F	X	
	To 110° F	☐	Other	Lesser-rheas can tolerate high temperatures; provide shelter from sun.					

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

Captive Dietary Needs:

Lesser rheas can be maintained on commercial ratite diet or other grain based diets. Breeders eat an average 650g-700g of commercial pellets per day per animal with variations within a year. It's also beneficial to provide vegetable matter for foraging (grass, alfalfa, etc.).

Life Expectancy in the Wild:	Males:	unknown	Females:	unknown
Life Expectancy in Captivity:	Males:	20-25 years	Females:	20-25 years

BREEDING INFORMATION:

Age at Sexual Maturity:	Males:	8-9 months	Females:	1 year

Courtship Displays:	At the beginning of the breeding season (autumn) males start fighting amongst each other. The purpose of these fights is to establish a hierarchy between males. The dominant male will be the first one to mate and incubate. The fighting technique consists of taking each other by the beak and pushing with the chest. The defeated bird will break from its adversary and run away. With the increased aggressive behavior, the males will start to perform a type of call known as "complaints" (loud and threatening exhalations). Outspreading the wings is a group behavior that involves a male and several females. The male starts the behavior by approaching the females with its neck curved like a hook, the wings outspread and walking slowly. The females answer by approaching with their heads lowered and surrounding the male making a circle. The purpose of this behavior is to bond the group in order to achieve successful copulations. It can be detected before the first mating (beginning of the winter) and during most of the breeding season.
Nest Site Description:	Nest-building starts towards the end of autumn, simultaneously with the courtship displays. Males can excavate several holes before scrapping the definitive nest, especially when they are young. The nest is a depression on the ground that can have a base of grass and/or feathers. Some nests can be semi-hidden by bushes.
Clutch Size, Egg Description:	May vary according to the number of females laying and can range from 9 to 25; eggs are elliptical olive/yellow fading to yellow over time. Average measurements: 129.6 mm long x 90.2 mm width. Average weight: 625.5 grams. Egg-laying is related with climate conditions, severe winters tend to delay it. In the northern hemisphere egg-laying usually starts in February- March.

Incubation Period:	40-42 Days – males may lose weight during incubation	**Fledgling Period:**	1 Day

Parental Care:	Male incubates eggs and raises chicks without female involvement. The male and the chicks (usually called "charitos") leave the nest several hours after hatching (precocial). The male does not feed the chicks directly, but when he stops to eat, the chicks gather around him and peck where he is feeding. When the chicks are 2 ½ months old the chicks stop sleeping under the males wings due to the hotter weather and the acquisition of juvenile plumage. Males may "adopt" stray or lost chicks from other males into their crèches, explaining the different sizes observed in the chicks inside a crèche. Chicks remain under supervision of male until approximately 6 months.
Chick Development:	Eggs hatch synchronously; the first chick to hatch calls to the other eggs, causing them to hatch shortly after. There are reports that some chicks hatched 2-3 days early due to this calls. Chicks are born with a rigid down, brownish-grey on the back with whitish stripes, and whitish underparts. Chicks can follow their father shortly after birth. Chicks are independent of the male at about 6 months of age, though they may remain with their clutch mates until they reach sexually maturity. Chicks molt for the first time when they are 2 ½ months old, acquiring the plain grey (not speckled) juvenile plumage. By 8-9 months old, chicks have reached adult size. At the age of 9-10 months the chicks molt again to acquire the adult plumage (brownish-grey to chestnut, speckled with white back and whitish underparts, including feathered upper tarsi).

CAPTIVE HABITAT INFORMATION:

Social Structure in the Wild:	Outside of the breeding season (summer-autumn) several social structures may be present including a) males with chicks, b) all-female flocks or c) one year old juveniles that will remain together till next autumn sometimes found alongside guanaco or vicuna. During the mating season, the males become territorial. Some older males become solitary.
Social Structure in Captivity:	Breeding groups can be structured in different forms including a) Pairs (1.1); b) trios (1.2); c) small breeding groups (10 or less, 2.6 for example) and d) large breeding groups (15 to 30 birds, with one male and many females). If breeding is not desired an all-female flock can be kept. All male adult flocks are not recommended although young males can be flocked together and split out as they become dominant.

Minimum Group Size:	Pair	Maximum Group Size:	Large breeding groups (15 -30 birds) keeping 1 male per 3 to 5 females or all-female flocks

Compatible in Mixed Species Exhibits:	Yes	**Comments:**	In the wild, lesser rheas often associate with South American camelids for mutual defense against predators. In zoos, lesser rheas have been

	successfully kept with guanacos, llamas, waterfowl, and tortoises. Due to its similarities lesser rheas are compatible with species listed as compatible with greater rhea.

Optimal Habitat Size:	2400 ft2 for two birds is recommended, adding an additional 20% of space per each additional bird. Large breeding groups (30-33 birds) have been successfully housed in 3 acre enclosures.

Management Challenges:	Lesser rhea are not currently maintained in American zoo collections. Their husbandry requirements are similar to those of the greater rhea. 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:

Lesser rheas can be distinguished from the closely related greater rhea both by size and by coloration. They tend to have browner plumage compared to the mostly gray greater rhea, and also tend to have white spotting not seen in the greater species.

Their main predator are humans. They are hunted for meat, skin, feathers, and eggs, while their habitat has been degraded due to overgrazing and desertification. They are often caught and injured in fencing. Other predators include cougar (Felis concolor), other felines, foxes and raptors that feed on chicks.

There is no information on the number of Lesser Rheas in Patagonia, but is believed that the population is decreasing.

During incubation, the male becomes very aggressive, even towards females. Females will lay their eggs outside the nest to avoid the male. Many of these eggs will later be transferred into the nest by the male, while others will be left outside un-incubated to rot (males will feed upon the flies attracted to these rotting eggs). One conservation strategy for this species has been to collect these “orphan eggs” and bring them into captivity for incubation and rearing before reintroducing the chick into the wild.

The species is also known as “Darwin’s rhea” based on Charles Darwin’s description of the bird during the voyage of the HMS Beagle. Darwin was the first scientist to recognize the difference between the two species (supposedly while dining on a rhea leg). The differences between the lesser rhea and the greater rhea played a possible role in Darwin’s development of the concept of speciation.

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