

Common Name Grey Gull

Scientific Name: Leucophaeus modestus FAMILY: Lariidae **ORDER:** Charadriiformes AZA MANAGEMENT: Not managed

GEOGRAPHIC RANGE

EUROPE Range includes coastal areas of Colombia, ASIA Ecuador, Peru, and NORTH AMERICA Falkland Islands. Breeding occurs in NEOTROPICAL х Northern Chile. AFRICA AUSTRALIA OTHER

FOREST

DESERT

GRASSLAND

COASTAL

RIVERINE

MONTANE

OTHER

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Found in coastal areas except in breeding season. Nesting occurs inland in the Atacama Desert, Chile

TEMPERATURE TOLERANCE



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From <u>° 30F to °90 F</u>

Can tolerate most weather conditions, but access to shelter when temperatures are below freezing is beneficial. Can tolerate heat, but access to shaded areas and a large pool or water source is ideal.

DIET



Captive dietary needs: Whole or chopped smelt, capelin, trout, herring, and silversides offered twice (three times when chicks are present) daily. Vitamin supplements offered daily: Vitamin E, Thiamine, Salt, Vitamin A Seabird Tablets can be crushed and sprinkled over the diet prior to breeding season (April - June), then discontinued once chicks have fledged.

UIFE EXPECTANCY Maximum Median Life Expectancy Longevity Within AZA Between 15 – 20, although one outlier lived to 30. In the Wild Unknown

CIRCADIAN CYCLE

DIURNAL CREPUSCULAR

NOCTURNAL

OTHER

Nocturnal during nesting season, as chicks would likely overheat during the day.

Within AZA No difference between sexes. In the Wild Unknown

BREEDING INFORMATION

AGE AT SEXUAL MATURITY

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Males 2 Years

Females 2 years

Incubation period: 29 – 31 days

Fledgling Period: 40 days

CLUTCH SIZE, & EGG DESCRIPTION

1 – 3 eggs, 2 is typical. Egg slightly pointed at one end.

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COURTSHIP DISPLAYS

Data deficient. Breeding season in the wild is generally November – January, but April – June in the Northern Hemisphere under human care.

NEST SITE DESCRIPTION

In the wild, the nest site is a small scrape in the sand, usually amongst large rocks. In captivity, they will utilize rock work nest cavities filled with play sand as well as oper sandy or pebbled areas in the exhibit.

🥏 CHICK DEVELOPMENT

Grey gulls have the slowest growth rate of any gull species. There is a high mortality rate during the first two weeks after hatching. More research is needed to determine reasons leading to this.

MARENTAL CARE

In the wild, both parents take turns making daily trips to bring food and water back for the chick. In captivity, both parents will care for the chick.

CAPTIVE HABITAT

SOCIAL STRUCTURE

In the wild: Gregarious. Feeds, rests, and breeds colonially.

In Captivity: A single pair can breed on their own, although breeding may be encouraged by having multiple pairs present. Careful attention must be used to determine parentage in large colonies.

✗ MIXED SPECIES EXHIBITS

Compatible in mixed species exhibits?



NO

Comments: Often kept in coastal-themed exhibits with Humboldt penguins and Inca terns. They are more timid than other gull species and may be displaced by other birds. Can also be housed with small herons, storks, spoonbills, ibis, stilts, lapwings, small waterfowl, and pelicans.

OPTIMAL HABITAT SIZE

As large as possible with multiple elevated perching and resting opportunities with access to a large water source.

Minimum Group Size: Very social, should not be housed singly.

Maximum Group Size: Dependent upon exhibit size only.

MANAGEMENT CHALLENGES

Achieving consistent breeding has been more difficult in recent years. Many of the birds in the US are likely post-reproductive, so imports are needed if the species is to be maintained long-term. Historically, Brookfield has been very successful in breeding the species. More research is needed in determining conditions for natural parent rearing in mixed-species exhibits and determining the most ideal nest site conditions. The population is currently unmanaged and consists of only fifteen individuals, all of Brookfield descent. If there is sufficient interest and successful breeding, formal management by the Shorebird TAG will be considered and the US population can be supplemented by imports from EAZA.

ADDITIONAL COMMENTS

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Conservation messaging opportunities include: protection of inland desert nesting sites and coastal feeding sites; competition with the fishing industry and the importance of seafood sustainability; effects of global warming; reducing and eliminating single use plastics. Questions and comments can be directed to the species champion: Kirby Pitchford, kpitchford@birminghamzoo.com

\bigcirc REFERENCES

BirdLife International 2018. Larus modestus. The IUCN Red List of Threatened Species 2018: e.T22694292A132539083. http://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T22694292A132539083.en. Retrieved on 12 February 2019.

Burger, J., Gochfeld, M., Garcia, E.F.J. & Boesman, P. (2019). Grey Gull (Larus modestus). In: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D.A. & de Juana, E. (eds.). Handbook of the Birds of the World Alive. Lynx Edicions, Barcelona. Retrieved from https://www.hbw.com/node/53966 on 19 February 2019

https://neotropical.birds.cornell.edu/Species-Account/nb/species/grygul/overview

http://www.avisoc.co.uk/table-of-contents/breeding-the-grey-gull-larus-modestus/

Pinger, Cindy. (2017). Charadriiformes Taxon Advisory Group Regional Collection Plan, 4th Edition; 2017 – 2021. Page 48. Retrieved from the Association of Zoos and Aquariums website on 20 February 2019.

Lindholm III, J. H., & Svanberg, I. History of Gulls in European and North American Zoos. Zool. Garten N.F. (2015), http://dx.doi.org/10.1016/j.zoolgart.2015.08.005

Photo by Oregon Zoo

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