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ANIMAL LIFE

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This fall, the acclaimed 17-volume *Grzimek's Animal Life Encyclopedia* — considered the best and most comprehensive animal reference available today — will be transformed into an interactive, media-rich, community-oriented, online interface. Look for these fascinating features:

This fall

- **Animals A-Z** — unparalleled coverage of more than 4,000 species (evolution, habitat, behavior, range and more)
- **Authoritative content** — up-to-date information written and reviewed by the world's experts
- **Curriculum correlation** — content corresponds to national science curriculum
- **Intuitive and credible** — letting kids explore and learn while supporting serious academic research
- **Media rich** — photos, maps, videos, interactive gadgets and more linked to periodicals, real-time news and websites
- **Unique interface** — choose from two interface designs to best meet the needs of your core users

Planned enhancements

- **Community connection** — upload photos, share travel stories and exchange research results and other information
- **Critical thinking** — discover opposing viewpoints about zoos, animal rights and more
- **More than animals** — find a world of animal-related information (biomes, prehistoric animals and more)

Preview it now

Visit www.gale.com/lookforit for a video preview of *Grzimek's Animal Life*, to sign-up for a free trial or to register for a Webinar.

The screenshot shows the website interface for the entry on *Panthera leo* (Lion). The page is organized into several sections:

- Navigation:** A top navigation bar includes 'HOME', 'ANIMALS', 'TOPICS', 'VIEWPOINTS', and 'COMMUNITY'. A search bar is located in the top right corner.
- Species Information:** The main title is 'Panthera leo (Lion)'. Below it is a large photograph of a lion. To the right, a 'QUICK FACTS' box lists taxonomic information: Kingdom: Animalia, Phylum: Chordata, Class: Mammalia, Order: Carnivora, Family: Felidae, Genus and Species: Panthera leo, Common Name: Lion, Other Common Names: French Lion, German: Löwe, Spanish: León, Taxonomy: Felis leo (Linnaeus, 1758), Africa, Asian subspecies: Panthera leo persica, most widespread in southeast Asia, now only in the Gir Forest, Gujarat, India.
- Physical Characteristics:** A section titled 'PHYSICAL CHARACTERISTICS' provides details on size and appearance: Length 43-100 in (110-250 cm), tail 24-40 in (60-100 cm), weight 270-570 lb (120-260 kg). It notes that males are 10% larger than females, have a short mane, and that mane color varies by season and age.
- Distribution:** A section titled 'DISTRIBUTION' states the range is Sub-Saharan Africa, excluding northeast Asia (lion in Gir Forest, India).
- Habitat:** A section titled 'HABITAT' describes the lion's range as wide, including tropical savannas and forests of Eastern Africa, open woodlands, and mixed areas of thick bush, acacia, and grass.
- Behavior:** A section titled 'BEHAVIOR' describes the lion's social structure: 'The most social of cats. Lion society is based on the pride, a group of related females and cubs. Pride size varies from two to 10 adult females depending on habitat and prey availability. Males typically four to six. A single male or coalition of up to seven males, almost always unrelated to the females, leads the pride. Males are the primary decision-makers, excluding other males from mating. Pride membership is stable, but members often scatter in sub-groups throughout the range, especially when foraging, and individuals spend considerable time alone. Prides are strongly territorial. Males mark territory by urine-marking and by roaring, usually at night, when the sound can travel 1 mi (1.6 km). They actively patrol the edges of territory, whereas females tend to stay near the center. Males face young competitors for pride tenure, and average tenure is only two to three years. Larger coalitions tend to win. Males are also highly social, and when not in charge of a pride will form coalitions to hunt and scavenge together. Larger coalitions are increasingly favored, but pairs and trios of males may be observed. Lions are densely social. Lion density varies from 0.4 to 1.5 per 100 sq mi (200 per km²), linked to seasonal prey availability. A pride's home range usually varies from 1 to 200 sq mi (250 to 500 km²), but can be more than 500 sq mi (1,200 km²) in some zones.
- Feeding Ecology and Diet:** A section titled 'FEEDING ECOLOGY AND DIET' describes the lion's diet: 'Medium to large ungulates, including buffalo, zebra, wildebeest, and warthogs make up bulk of diet, but lions will take a wide range of prey from small rodents and birds to young rhinos, hippos and elephants. Asiatic lions prey largely on deer and feral buffalo. Lions are frequently scavengers. Most hunting is nocturnal, but may ambush prey in daytime at waterholes in dry seasons. Females do most of the hunting, males hunting larger, solitary prey such as gazelle or kudu. Will hunt cooperatively, herding out to partially surround prey, but more often only one or two lions hunt, while the remainder stalk. Lions can only walk 26 mph (42 km/h), so rely on stealth to within range of a short dash. They kill prey by suffocation, clamping their strong jaws on an animal's windpipe or trachea. Only one in four hunts are successful, with countless nights lost. Lions eat communally, but males take the lion's share of the food before females are allowed to eat, their cubs last of all. In lean times, cubs frequently die of starvation. Lions need about 30 to 35 lb (14 to 16 kg) of food per day, but feeding is often irregular and a male may eat 110 to 150 kg (240 to 330 lb) of raw meat. REPRODUCTIVE BIOLOGY Polygamous. Breeding largely non-seasonal. Females are usually estrus at three to four years. Mating occurs about three times per hour for several days, and a female may mate with more than one pride male. Conception around 150 days. Birth size one to six. Cub mortality can be very high, up to 75% in first year if prey is scarce. Cubs start to eat meat after three months, but nurse until six months. Males leave the pride at two to four years and usually if forced out by a pride takeover, most females remain in the pride. Males that take over a pride will attempt to kill young cubs (though mothers often hide them successfully), to ensure that own chance of getting offspring during their brief pride tenure. Females show a burst of heightened sexual activity that are infertile for three months following a takeover, attracting other males and increasing competition for tenure, to ensure the fittest males breed. Once pride males are established, females often breed synchronously, which increases cub survival rate. Females may also rear young communally, and cubs suckle freely from lactating females. CONSERVATION STATUS Classified as Vulnerable by IUCN. Panthera leo persica is Critically Endangered, with only around 280 mature animals. Lions are heavily persecuted outside of protected areas and loss of habitat and prey have contributed to population decline. Total population may be less than 10,000 (including individuals, with no one occupying larger than 1,000. SIGNIFICANCE TO HUMANS Lions are depicted in the art of many ancient cultures, including Egyptian cave paintings from more than 30,000 years ago. Numerous African cultures still believe in the magical and healing properties of lion body parts. The extinct Barbary lion featured in the cartoons of ancient Rome. Where lions conflict with domestic stock, they are vulnerable to poisoned carcasses and trapping and poisons animals may be legally shot in some countries. Lions may also pose a threat to human life, tearing man-made if not injured, or when prey is scarce. Lion and Stephen J. Ross
- Interactive Elements:** A 'PHOTOS & ILLUSTRATIONS' section shows a grid of images. A 'VIDEOS' section features a video titled 'Lion' with a description: 'The lion (Panthera leo) is a member of the family Felidae and one of the great felines.' Another video is titled 'Whisper the lion hum' with a description: 'Lion's roar is about 100 dB, with pronounced, intense, sound, but facts, and an overall content.' A 'RELATED LINKS' section includes links for 'Lion (species)', 'Cub (predator)', and 'African Lion Conservation Initiative'.
- Footer:** A 'HAVE YOU TAKEN A BETTER PHOTO?' section encourages users to upload photos. Below it are links for 'ABOUT GRZIMEK'S ANIMAL LIFE & CONTENT', 'CONTACT US', 'PRIVACY POLICY', 'COPYRIGHT', and 'TERMS OF USE'. The Gale logo and 'CENGAGE Learning' are at the bottom right.

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