

OTTERS



notes

ADELAIDE ZOO
EDUCATION SERVICE

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Otters belong to the Mustelid family, which includes weasels, badgers and stoats. There are 12 species of otter, distributed over many parts of the world. Otter habitats include mountain streams, lakes and rivers, estuaries and coastal areas. They range in size from the Giant Otter of Brazil, which grows to 180cm in length, to the little Oriental Small-Clawed Otter that reaches only 90cm. The latter can be seen in the Adelaide Zoo.

Otters are carnivorous, with their natural diet including fish, frogs, squid, crabs, shellfish, water birds and eggs. Otters are very energetic animals, and have a high metabolic rate i.e. food passes through their digestive system in a few hours. This means they must eat several times a day. Some otters (such as the Oriental Small-Clawed Otters) are 'hand orientated' and hunt by grabbing their prey by their forepaws. Other otter species, such as the Giant Otter, are 'mouth orientated' and chase their prey under water, seizing it with their mouth. Once caught, the prey is immobilised by being chewed at either the head or the tail end – this prevents the prey escaping if the otter loses its grip on its slippery meal. Otters have well developed pre-molar teeth used for crunching fish bones

Otters are well adapted to an aquatic life. The flattened head, long body and tapering tail enable them to glide easily through the water and the feet are webbed for more efficient swimming. Stiff whiskers on the muzzle and also on the elbows assist in hunting in murky water by detecting water movements. The small ears can be tightly closed whilst swimming and the fur is water repellent, with a soft dense undercoat. A large lung capacity allows otters to remain submerged for several minutes.

Some otter species live solitary lives, pairing only for a few months during the breeding season while other species live in extended families with strong bonds between breeding pairs. The Oriental Small-Clawed Otter lives in groups consisting of several pairs and their families. Otters give birth to between one and six pups, after a gestation period of about two months. The blind and helpless young spend their first weeks in a burrow called a 'holt', or a natural cavity or rock shelter.

The Sea Otter, found in the Northern Pacific, has a skill not found in any mammal other than

primates (monkeys and apes). This species uses a tool while hunting. To remove abalone from rocks, the Sea Otter bangs a stone on the edge of the abalone shell until it loosens its grip. Stones are also used as an 'anvil' to open mussels or clams. The animal floats on its back, resting a stone on its chest, and cracks the shellfish open by banging them sharply against the stone.

Adelaide Zoo keeps and breeds the Oriental Small-clawed Otter (*Aonyx cinerea*). This species is found in North Western India, South Eastern China and South East Asia. Many aspects of this otter's behaviour can be seen by spending a few minutes watching these delightful creatures. Otters often rub their bodies on logs, rocks and plants. This leaves scent from glands at the base of the tail, to communicate identity, sexual state and receptivity to other otters. While resting, these otters often rub their bodies together, and against the ground, mixing their individual scents together to form a 'group scent'.

Oriental Small-Clawed Otters are very social, and have a number of different calls, each with its own meaning. The high pitched 'bark' is a contact call, which calls all members of the group or family together. This call is repeated most enthusiastically when the otters spot a keeper carrying a bucket – dinner time! This can be seen several times daily at random feeding sessions. Other calls include a quiet bird-like chirp and a low hum – these calls are often used between mother and pups, as well as between group members. A long growl is an aggressive call, and a sharp 'hah' is a warning of potential danger.

These otters share a communal toilet area. In this way the group marks out its territory. The keepers clean these toilet areas daily. However, the scents remain.

In the wild, otters spend much time searching for food. In captivity, food is provided for them, so

their free time is spent in playful activities such as sliding, rolling and chasing. These activities help to maintain social bonds within the group and act as a substitute for hunting.

Keepers encourage the natural behaviour of our otters by providing a variety of foods, such as whole crabs, cockles and whitebait scattered around their exhibit to encourage foraging. Dried grasses and twigs are offered to give opportunities for nest building and the naturalistic exhibit with logs, plants and rocks enables the otters to display a variety of natural behaviours.

The major threats to the survival of otters in the wild are all related to humans. As we continue to spray pesticide and dispose of chemicals into the environment, waterways are polluted thus affecting the otters food supply and water quality.

Bans were placed on the hunting of Giant Otters for their pelts in the early 1970's, but poaching is widespread. The other major threat to otters is habitat destruction, including clearance of vegetation near suitable quiet streams and lakes which otters need to feed and breed.

In 1994, Adelaide Zoo received 4 pairs of Oriental Small-Clawed Otters of known geographic origin. These represented the founding stock for a regional breeding program. Using a specially designed computer program, staff at the Zoo developed a breeding strategy to maximise the genetic diversity of the group and distribute them and their offspring throughout zoos in the Australasian region.

