# November 2017- photos courtesy Arkive/Wildscreen

# Pangolin Fact Sheet



#### Name and Populations

The word 'pangolin' comes from the Malay word for rolling up 'penggulung', after the way that pangolins roll into a ball to protect themselves.

In Zambia there are 2 pangolin species; the Ground pangolin (*Smutsia temminckii*) and the Tree pangolin (*Phataginus tricuspis*). Both species are listed by the IUCN as vulnerable, with decreasing populations. As the names suggest; Ground pangolins are terrestrial species, whereas Tree pangolins spend a lot of time up in the trees (arboreal).

#### Age - Height - Weight

In captivity pangolins have been known to live for up to 20 years, however due to their shy, elusive nature it is unknown how long they live in the wild.

Ground pangolins measure around 65-110cm from head to tail, and weigh between 7-18kg

Tree pangolins measure around 45cm and weigh up to 2kg.

#### **Habitat**

Ground pangolin - savannah woodland, floodplain grassland

Tree pangolin - lowland tropical moist forest and dense woodlands

#### Characteristics

- Pangolins are mainly nocturnal; Tree pangolins prefer to sleep up in the trees during the day whilst Ground pangolins sleep in burrows which they either dig themselves or else use burrows which have been abandoned by other animals.
- Pangolins are insectivores, mainly eating ants and termites which they detect by scent, like many nocturnal animals they have poor eyesight. They can eat up to a staggering 23,000 insects a day (around 70 million a year)! With their strong front claws they break into ants nests and termite mounds, then use their extremely long, sticky tongues to get to as many insects as possible. Pangolin tongues can be as long as their head and body put together. The tongue is attached way back inside the body between the pelvis and the last set of ribs. When not in use the tongue rests in a special pouch inside the pangolin's throat. There are muscles in the pangolins mouth which they can use to prevent insects from escaping.
- To protect themselves from insect attack whilst eating, pangolins have special muscles which they can use to close their nostrils and ears, they also have thick eyelids to guard against biting insects.
- Pangolins don't have teeth, instead they have keratin spikes in their muscular stomachs which they use along with small stones or sand (swallowed whilst eating insects) to grind the food up.
- Due to their prolific insectivorous diet, pangolins are important in pest control, often eating insects that negatively impact crop production.
- Unusually for a mammal, pangolins are covered in tough scales, looking a little like artichokes or pine cones in appearance. The scales are made of keratin, the same protein our hair and fingernails are made from. The scales grow throughout the life of the pangolin, but are worn down by activities such as creating burrows. When the pangolin feels threatened it rolls into a ball and its' tough scales provide protective armour, the body parts not covered in scales i.e. face, snout, belly etc. are protected inside. The pangolin can use the erect scales on its tail to lash out at predators, they will also hiss, puff and can expel a foul smell from anal scent glands to defend themselves.
- Pangolins have one baby or 'pangopup' a year, the gestation period is 140 days for Ground pangolins, and 150 days for Tree pangolins. Pangopups are around 6" long at birth. At first their scales are soft and pale in colour; however these begin to harden after a day or so. They feed on their mother's milk for the first 3-4 months, however after one month they can begin feeding on insects which they find when they accompany their mother out of the den, riding on the base of her tail. A mother pangolin will roll around her baby to protect it, and whilst they are sleeping. Ground pangolins care for their young in burrows.
- Tree dwelling pangolins can support their entire body weight hanging from branches by their semi prehensile tails.
- Claws on their front feet and hair instead of scales on the lower part of their forelimbs help them to climb. They also have pads at the tip of their tails to help them to grip.
- · Pangolins are surprisingly capable swimmers, they fill their stomachs with air to aid buoyancy.



**DID YOU KNOW:** 

There are 8 surviving species of pangolin, four African species; Giant, Tree, Ground and Long-tailed, and four Asian species; Chinese, Indian, Philippine and Sunda. Asian pangolins have bristles which emerge between their scales, and African pangolins do not. Despite the pangolin's appearance, they are not closely related to anteaters and armadillos.



### About the David Shepherd Wildlife Foundation

The David Shepherd Wildlife Foundation (DSWF) supports a range of innovative and far-reaching conservation projects throughout Africa and Asia that have anti-poaching, education and undercover investigation at their heart, all working to save endangered wildlife and their habitat.

#### **Predators and Threats**

Predators - leopards, hyenas, lions, humans

Unfortunately pangolin populations are in severe decline. They are the most trafficked mammal in the world. It has been estimated that a pangolin is taken from the wild every five minutes. Over a million are believed to have been illegally captured and sold in the last decade alone. Pangolin meat is considered a delicacy in some Asian countries, some also believe that their scales can be used to cure a range of illnesses. Pangolins are also vulnerable to loss of habitat due to an increase in agriculture and other land uses. They may also be poisoned by pesticides used to control insect numbers, caught in wild fires and injured or killed by electric fences.

In Africa, they are eaten as a part of the bush meat trade and are used in traditional African medicine. There is absolutely no scientific evidence to suggest that pangolin scales have any medicinal benefit. Due to declining numbers of pangolins in China where they have suffered a 94% decrease over the last 20 years, attention has now turned to African pangolins to supply this market too.

Sadly, pangolin are easy to catch as they roll up into a ball when threatened and a poacher can simply pick them up and carry them away.







## Our work with pangolins

DSWF has funded the establishment of a pangolin protection programme in Zambia, where there has been a dramatic increase in the number of pangolin confiscated from people arrested.

The programme will support a local awareness campaign and will increase funding for wildlife crime prevention in key areas. As well as specialist rehabilitation units to return seized animals back into the wild. Often all the pangolins require before being returned to the wild is a veterinary check and 24 hours rest. Weaker animals who may be either young or underweight, need a longer period of care, including daily 3 hour walks where they can learn how to catch and eat insects with their long sticky tongues!

#### Donate to DSWF and you will help:

- Support local awareness campaigns to counter the trend in taking these animals from the wild
- Fund wildlife crime prevention
- Support specialist rehabilitation units to return seized animals back to the wild
- Provide a period of care for young or underweight pangolins preparing them for their return to the wild

For more information about pangolins and the other endangered species DSWF protects go to: www.davidshepherd.org