

# Biodiversity



Number 19

## King fern (*Ptisana salicina*)

### DESCRIPTION

King fern is a large, robust plant with a distinctive tropical appearance. It can grow up to five metres tall with thick, dark green fronds up to two metres wide. The fronds are attached to massive but short, scaly hemispherical stems. A large, ear-like lobe at the base of the plant protects the young fronds as they uncoil, as they will wilt if exposed to sunlight too early.

### DISTRIBUTION

Indigenous to New Zealand and the South Pacific, the king fern is predominantly found in lowland areas in the north-west of the North Island, from inland Wanganui northwards. Its preferred habitat is varied and it is often found outside the entrances to caves and tomo shafts. It can also be found beside shady streams and in damp forests often growing in the company of parataniwha (*Elatostema rugosum*) and supplejack (*Ripogonum scandens*). Small brown sporangia are fused to the underside of the frond in two rows. Mature plants may produce spores at any time of year, though propagation is often very slow and sometimes difficult.

### KING FERN IN TARANAKI

Reports of king fern in the Kaitake Range on Mt Taranaki from 20 or 30 years ago suggest that it was once quite common there. In recent times, searches of some of these areas have failed to locate any plants at all and king fern may now be locally extinct there. King fern populations in unmanaged North Taranaki forested areas are also in decline. Thankfully, king fern persists and thrives in some small forested areas in Taranaki where threats are managed.

### WHAT CAN YOU DO TO HELP

- Fence off areas domestic stock where king fern is known to be or is likely to grow, to protect it from stock.
- Control wild goats and pigs in areas where king fern is known to be or is likely to grow.
- If you come across a population of king fern, try not to damage, collect or relocate it.
- Report sightings to the Taranaki Regional Council Environmental Services Section.



### CONSERVATION

King fern is a native New Zealand species that is endangered and listed as 'at risk'. It is declining in Taranaki and highly threatened within its normal habitat. Several large populations of king fern have recently been wiped out. There are several sites in Taranaki where king fern has been re-introduced and surviving well.

### THREATS

Threats include:

- Feral and domestic cattle, deer, goats and pigs.
- Plant collectors.
- Habitat degradation.



### QUICK FACTS

- The starchy base of the King fern plant was a traditional food for Maori.
- Also known as tawhiti-para or horseshoe fern.