

Bracken



Pteridium esculentum

IF there is one fern everyone knows, surely it is bracken! Where it occurs it is very obvious, growing from an extensive network of underground rhizomes, and forming stout, branching fronds that can reach more than 2 m in height. Initially they are covered with chaffy brown scales, but soon become smooth with age. It grows in a variety of habitats in the higher rainfall zone, but always on well-drained soils.

Bracken is the most widespread of all the ferns, growing in every continent except Antarctica, from the tropics to the arctic circle. Its taxonomy is a bit confused, some people consider that there is only one species worldwide, *Pteridium aquilinum*, having geographical variants, while others list six species. If you agree with the multi-species approach, the one in south-west WA is *P. esculentum*.

Bracken responds to disturbance by increased growth. Its rhizomes are well protected from fire and it can come to dominate the understorey in forest country which is subject to frequent burning. It can also take over poorly managed paddocks, displacing feed, though deliberate heavy cattle stocking can be used to control it, as their weight damages even the underground rhizomes.

If you cut the rhizome, you will see that the woody vessels are clustered in the centre - use your imagination a bit and you can see all sorts of shapes. Traditionally in Europe it's a double-headed heraldic eagle, hence the European species is *P. aquilinum*. Alternatively, an elderly Wiltshire countryman (who was hoeing the plant out with a mattock at the time) told me many years ago that the mark is that of the devil's hoof, put there to remind farmers what an evil pest the plant is. It is also toxic to stock when eaten in large quantities, as the fronds contain an enzyme which destroys thiamine and induces severe vitamin B1 deficiency. All of which makes even more astonishing how important bracken

became for the Maoris. Bracken roots are starvation food at best but, once the Maoris had eaten practically everything else on their island home, it became vital for their survival and wars were fought for possession of it.* There is no record that I have been able to find of Aboriginal people in south-west WA eating bracken.

The word 'bracken' comes from the old English verb 'to break', appropriate enough for the tangle of dead stems, called collectively a 'brake'. Colonists in America used this word for any tangled thicket, whether it had bracken in it or not, and so it has come into general circulation.

So, bracken is part of the ecosystem, especially in jarrah and karri country. But has past management caused it to increase in abundance? If so, you might like to control its extent. Slashing stems repeatedly is a good method as this eventually exhausts the plant's resources. Brushoff® or Ally® are probably the best herbicides to use.

Penny Hussey

* For the story of how the Maoris adapted to life in their new land, read Tim Flannery's "The Future Eaters".