



PROTECTING PEATLAND ECOSYSTEMS AND ADDRESSING THREATS IN SOUTHWESTERN AUSTRALIA

How to Identify a Peatland

What are Peatlands?

Peatlands are a rare type of pinger (swamp country/wetland) found in the wetter parts of southwestern Australia. They form when boorna (plant) material slowly builds up in pinjer ('wet ground'/waterlogged) conditions, creating deep, organic soils known as peat.

Over thousands of years, peat can accumulate to several metres in depth, forming a unique ecosystem. These areas often stay moist even

in beeruk (summer), providing an important refuge for boorna (plants) and taajt (animals) that cannot survive in drier environments.

Peatlands are commonly found in low-lying, waterlogged areas, such as valley floors and along beeliaa (creeks). However, they can also occur higher in the landscape where kayup (water) seeps out from surrounding slopes.

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Look for KEY Peatland Plants

Undisturbed peatlands are often:

- Dense and difficult to walk through
- Wet underfoot
- Covered with fine, tangled vegetation
- Very little bare soil at the surface

One of the easiest ways to identify a peatland is by the vegetation. One type of peatland in southwestern Australia is dominated by the 'rush-like'

Empodisma gracillimum (Tanglefoot).

How to recognise *Empodisma*:

- Very thin (0.5mm), lime-green stems
- Stems forming tangle scrambling masses among other vegetation
- A small leaf-like structure (bract) on segments along the stem, sticking out at a right angle
- It can sometimes be confused with other similar species such as *Taraxis grossa*, *Sporodanthus rivularis* or *Hypolaena*.

Another plant commonly found in peatlands is *Homalospermum firmum* (a type of tea-tree).



2 Check the Soil (Peat)

Peat soils are quite distinctive.

Look for:

- Soft, spongy ground underfoot
- Dark brown to black soil
- Soil made up of partially decomposed plant material
- Very little quayar (sand) (unless the site is disturbed)

Simple field test:

- Push a stick or probe into the ground
- If it slides in easily with little resistance, it may be peat
- Measuring how deep the probe goes can help indicate how much peat is present



3 Consider the Landscape Position

Peatlands are most often found in:

- Valley floors
- Swampy flats
- Along slow-moving creeks
- Slopes where groundwater reaches the surface



4 Signs of Degraded Peatland

Not all peatlands are in good condition.

In disturbed areas you may notice:

- **Loss or absence** of *Empodisma*
- More **exposed** peat surface
- **Drying** of the soil
- Raised **pedestals** or mounds of peat around the base of larger shrubs

In some cases, peats co-occur with **acid sulphate soils**; when they are degraded by digging or drying, they can acidify and further damage the ecosystem.



For more information visit the **PEAT Southwest** website:
www.peatsouthwest.com.au

Or contact your local NRM Office:
South Coast NRM www.southcoastnrm.com.au
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