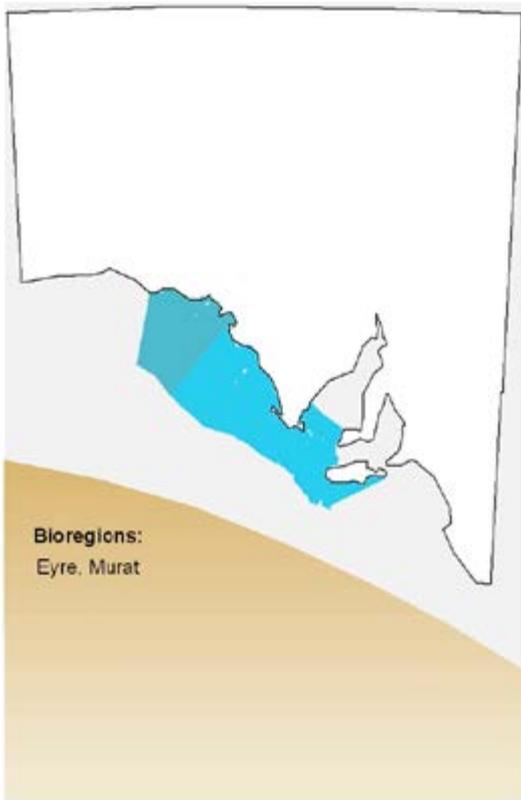


# Little Patty

*Parvulastra parvivipara*



Map courtesy of Mapping Unit, Customer and Commercial Services.

Map is not intended to indicate spatial distribution of the species, only the bioregions in which the species is found.

Little Patty refers to tiny sea stars that grow up to a centimetre in diameter – these sea stars are smaller than a five cent piece! Being so small and limited in distribution, the Little Patty wasn't noticed and recorded until 1975. They are endemic to South Australia. Sea stars usually have five arms that come from a central disc. They can move in any direction as they hunt for food. A resistant and robust species of sea star, the Little Patty can survive dramatic changes in the water temperature of their rock pools from zero to 40°C.

## Diet

Little Patty sea stars are herbivorous – they can eat microalgae on granite rocks. Cannibalism of young by other young has been reported in the development stages to attain a larger size.

## Breeding

Little Patty sea stars are hermaphrodites (they have both male and female parts) and they can fertilise their own eggs. This species broods their young internally and releases them through the body wall of their backs as miniature sea stars. They are one of only six species of sea stars in the world that can reproduce in this way. Usually a pale apricot colour, they are slightly transparent. When held up to the light it is possible to see the outline of young developing inside them. Up to 36 young are produced per sea star and they vary in size from 0.5 to 2.5mm in diameter when born.

## Habitat

This species lives in moderately exposed rock pools in intertidal areas. They have no larval dispersal stage, which means that the young never move far from their families. They have been found in only seven granite boulder fields within a 200km stretch of the Western Eyre Peninsula from Point Labatt to Cape Vivonne.

## Threats

These sea stars have a highly restricted distribution so unpredictable events in those areas (such as an oil spill) could be disastrous. Sea level rise from climate change is a potential threat as their habitat is in the coastal zone. Marine pollution is also a threat to these little sea stars.



Star of the seas! The Little Patty is the world's smallest viviparous (bears live young) sea star.

### Conservation

You can help the Little Patty by:

- checking out rock pools when you are at the beach but not disturbing or taking home marine species
- not polluting. Anything washed down a storm-water drain goes straight out to sea
- getting behind SA's Marine Parks – they are being created to protect species like the Little Patty.

## For further information

### Public enquiries

For more local information on any of the species in this resource please contact your nearest Natural Resource Centre office on:

**Eastwood:** (08) 8273 9100

**Gawler:** (08) 8523 7700

**Lobethal:** (08) 8389 5900

**Willunga:** (08) 8550 3400

### Education enquiries

For teachers wanting more information about environmental education resources and opportunities please contact the relevant NRM Education sub regional team on:

**Northern Adelaide:** (08) 8406 8289

**Barossa:** (08) 8563 8436

**Central Adelaide:** (08) 8234 7255

**Southern Adelaide:** (08) 8384 0176

**Southern Fleurieu:** (08) 8551 0524

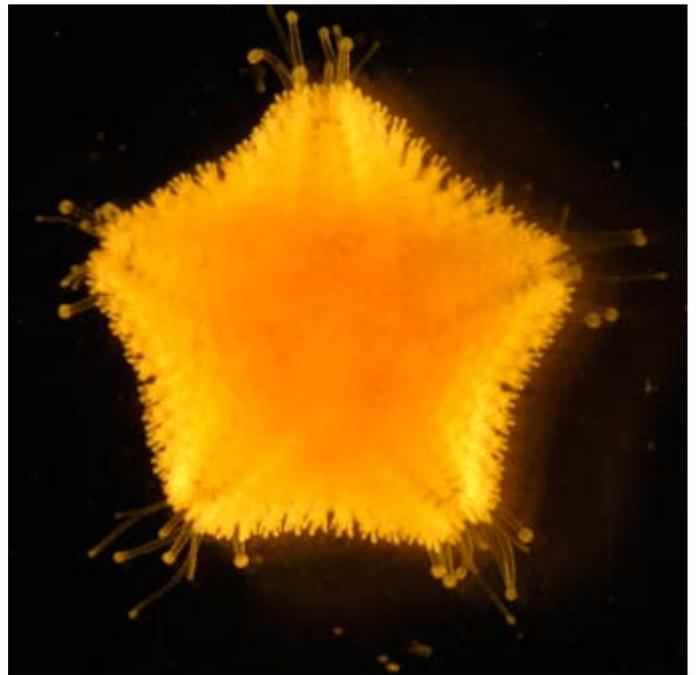


Photo by Lana Roediger

Little Patty



Photo by Lana Roediger

Little Patty

