

Starfish-killing robot to be unleashed

An autonomous robot designed to search for the invasive crown-of-thorns starfish (COTS) and give them a lethal injection, is to be deployed on the Great Barrier Reef. COTS, which prey on coral, have destroyed up to 40% of the reef over the last 30 years

GREAT BARRIER REEF
(World heritage area)

Coral Sea

AUSTRALIA
QUEENSLAND

400km
250 miles

Brisbane, Moreton Bay:
Field trials underway

Image recognition system

Robot trained to recognise COTS from among vast range of corals using thousands of still images of reef and videos taken by divers

If robot is unsure that something is a COTS, it takes photo for human verification. Feedback incorporated into robot's memory bank

GPS & communication antenna

COTSBOT ROBOT

View from above

Thrusters

Cameras

Extended arm:
Administers fatal dose of bile salts

Robot operates over one metre of seafloor for up to eight hours at a time, delivering over 200 lethal shots

Starfish not to scale

COTS outbreaks due to water pollution