OceanWatch Australia works with the seafood industry and the community to ensure Australia's marine environment is healthy, productive, valued and used in a responsible way.



## Turtle smart crab pot –Modifications to existing conventional (2 or 4 entry funnel) round mesh crab pots:

(a) Two extra steel rings (6-mm) ~1.0m diameter (each) \*Potential benefits- Inserting two extra steel rings at strategic locations will have two potential benefits:

- 1. Reduce sea turtles ability to tear holes in the crab pot meshes (at areas which have been noted as having the most frequent interaction). This will reduce the chance of turtles being entangled in the pot meshes, and reduce loss of crab catches through these areas.
- 2. The two extra rings increase the weight of the trap (from 5 to 7.5kg) and reduce movement and loss of pot in rougher environmental (sea) conditions.

(b) Reducing the circumference of the crab pot entry point (funnels) through insertion of a heavy ply twine at the centre of each funnel.

<u>\*Potential benefits</u>- This aims to prevent sea turtles from entering the crab pot (and subsequent drowning) in their attempt to remove the bait-bag or trapped crabs.

## (c) Heavier ply mesh (36 ply)

\*Potential benefits- There are two potential benefits to increasing mesh ply thickness.

- 1. Reduce the ability of turtles tearing holes in the crab-pot meshes (increasing twine thickness from 24 to 36 ply). This will reduce the chance of turtles and finfish bycatch species from being entangled in the pot meshes.
- 2. Turtles are a learned animal that may associate crab pots with a free feed. Increasing ply thickness may minimise sea turtle interactions.
- (d) Lead core polyethylene rope/ or sink rope (no lead). The length of rope used is dependent on area, conditions and depth deployed.

\*Potential benefits- Lead core rope/ sink rope, hangs vertical in the water column (negatively buoyant) which alleviates two potential problems:

- 1. Reduce turtles chance of being entangled in the crab pot float rope (lead core rope/ sink rope are rigid and less susceptible to entangling animals that contact it).
- 2. Vertical orientation of lead core/ sink rope should reduce the number of propeller cut-offs by alleviating the amount of excess rope floating on the water surface (this will reduce the number of pots lost whilst fishing, i.e. reduce crab pot ghost fishing).

