

THE WESTERN ROCK LOBSTER

The western rock lobster or western crayfish, *Panulirus cygnus*, is a clawless marine crustacean found off the west coast of Australia. It is Australia's most valuable fishery and one of the first fisheries in the world to be certified as ecologically sustainable by the Marine Stewardship Council. Western rock lobsters are caught and transported live to processing factories up and down the West Australian coast, where the majority of them are exported live to Asia, particularly Japan, Hong Kong and Taiwan. A significant portion are also exported to the United States and Europe as frozen lobster tails.



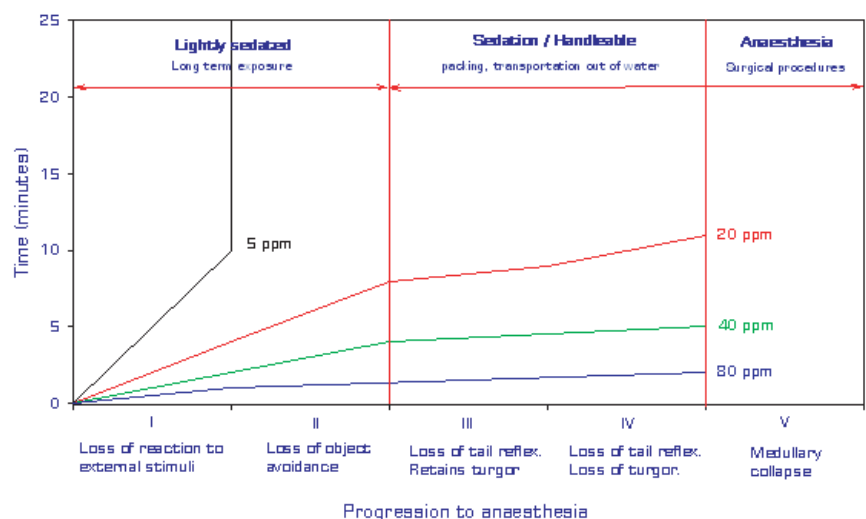
AQUI-S® RESPONSE

Information on the efficacy of AQUI-S® for western rock lobster can be used to assist you with determining the most appropriate AQUI-S® concentration required for a particular handling situation such as sedating lobster prior to a dry transport. It is important to be aware that different environmental and biological factors may affect the progression of lobster through to anaesthesia. Biological factors include species, stage of the life cycle, fish size and health. Environmental factors include oxygen levels, water temperature and external disturbances. All these factors affect the metabolic rate of fish and therefore the pharmacokinetics and pharmacodynamics of a fish sedative.

METHOD

Five animals of approximately 500g were transferred to tanks at 18°C. Various concentrations of AQUI-S® were then dispersed in separate baths and the animals were exposed for a 20 minute period. The animals were observed for the progression through sedation to anaesthesia.

TREND GRAPH



RESULTS

- * At an AQUI-S® concentration between 20 and 80ppm (mL per 1000L of water) lobster were suitable for transport and handling procedures in 1 to 8 minutes.
- * At 5ppm fish remained lightly sedated indicating that this dose is suitable for extended exposure to AQUI-S®.
- * All lobster made a full recovery, showing normal behaviour within 10 minutes of being placed in clean water.