



ABALONE ASSOCIATION NSW

Representing N.S.W. ABALONE and SUTS Fisheries

Email: [REDACTED]

20th September 2022

Submission on Climate-related marine invasive species

Abalone Association of NSW

Representing the NSW Abalone and (Sea Urchin & Turban Shell) SUTS Fisheries

AANSW is the peak industry body for the NSW Abalone and SUTS fisheries.

Since the late 1960s/early 1970s the abalone divers in NSW have reported and acted on what is now being seen as an environmental threat to our great southern reefs.

The abalone fishery was one of the first fisheries where the diver could see and report their observations of the impacts of harvesting and changes in environmental conditions on the reef systems where they dive.

Since the mid 70s NSW divers have exploited Long Spined Purple Sea Urchin at various times primarily for export opportunity. In the past 20 years a primary focus on the creation of a viable domestic market has seen demand steadily increase, and continues today. NOMA award winnings Worlds best restaurant featuring Long Spined Sea Urchin roe on their Sydney tour back in 2016. Sea Urchin is now enjoyed by foodies from all nationalities.

When the Abalone fishery became the first fishery in NSW to be restricted, following years of open access and depletion, sea urchins and turban shell were included in that restricted fishery due to the history and relationships between abalone, sea urchins and the marine habitats they share.

The fishery has a long documented history of sustainable commercial harvest and investment in research. (Appended #1)

Considerable investment has been made in the processing sector over the years since 1974 and more recently by one of our industry partners establishing an export approved processing factory based in southern NSW to capitalise on the insatiable demand for quality Sea Urchin products.

From Sea Urchin Harvest P/L

Our investment is in the millions, from Chris and I. I would say personally \$2M as a moderate guess.

We literally have dedicated ourselves to this everyday since we started. We started 12 years ago when there was no viable market. And worked so hard to create a market that is now viable for all.

Our latest facility will be a show piece and is one month from finish .It will be the first export facility of its kind in mainland Australia for sea urchin.

We received support from NSW govt of \$200,000 for our export facility. Which has cost us considerable more than that.

Any support to harvest and the processor is greatly needed. To create effect on the marine temperate reefs requires a team effort. eg. Without the processor there is no orders. Without the divers there is no supply.

Export offers great opportunity to all . Jobs and environment.

AANSW recognise the impact that Long Spined Sea Urchin has had on our marine eco systems that have been well documented in numerous research projects (Appendix #2)

AANSW also recognise and support the advancement made into market opportunities both domestic and overseas and the potential jobs creation this industry presents.

AANSW see this as an “opportunity” rather than a threat.

(b) management options, challenges and opportunities to better mitigate or adapt to these threats, and governance measures that are inclusive of First Nations communities;

Along the NSW coast the urchin divers and processors have faced these challenges to developing harvest and fishing techniques along with the labour intensive processing operations necessary to produce high quality roe for the markets.

The challenge for the diver has been gaining the experience necessary to harvest urchins that are suitable for processing, as many urchins in low feed areas (barren habitats) contain poor quality roe and as such the divers have to quickly learn how to recognise the urchin “grazing lines” as well as targeting the right size and in a sustainable manner.

The challenge for the processor on any given day is engaging and keeping staff with the skills appropriate to producing a high quality seafood product for both domestic and export markets.

In terms of management options the structure for this “developing fishery” is already established and has been since 1980.

There is a limited (restricted) number of licences set at 37 which spread along the NSW coast in major ports could sustainably harvest *C. rodgersii* well into the future.

Currently the harvest from the fishery reflects the small market however, in view of possible future expansion of the market as a response to growth in demand, industry is looking at future management options to avoid over exploitation and stock depletion.

FUNDING REQUIREMENTS

AANSW and the divers for both abalone and sea urchins in driving the Plague to Profit project with Oceanwatch, saw that the most efficient way to both control urchin overgrazing on the great southern reef and enhance the quality and value of the roe processed is for the commercial harvest and processing sector to be supported in their endeavours.

A well drawn up and managed harvest strategy for *C. rodgersii* in NSW which assists and promotes long term sustainable harvest will create a balance between *C. rodgersii* overgrazing and harvest which will greatly favour the recovery and maintenance of the habitat that supports not only the species **but the associated biodiversity.**

MARKETING ASSISTANCE

AANSW suggest funding is essential for the processing/marketing sector in this developing fishery, being mindful of the investment by industry over years of involvement in this fishery.

As the market grows the harvest fraction of total biomass will increase.

In turn a greater harvest would employ more divers and process workers that will have benefits to the ecosystem, along with the obvious economic benefits flowing to communities along the NSW coast.

Balancing the fact that Long Spined Urchins are endemic to NSW waters with the potential risks of overgrazing and migration into southern Australia requires expertise from trained divers and good science to manage this paradigm shift, AANSW divers and NSW processors offer their assistance to both fishery related research and market development.

Considering the implications of poor management whilst respecting the needs of processing investment is an area we seek to succeed into the future.

We are happy to provide our experience and expertise as required during your

inquiry into Long Spined Sea Urchin.

Yours Sincerely

Greg Rzycki President AANSW

Greg Finn, Rachael Theodore, John Smythe, Craig Shepherd

AANSW SUTS committee members

APPENDIX #1 Commercial Harvest history

A brief timeline of commercial fishery involvement with sea urchins

1974 A Japanese processor set up a processing plant at Port Stephens NSW abalone several divers supplied *C. rodgersii* harvested locally. The facility lasted for two years and the processor moved to California as Californian urchins were more favoured by the Japanese market

1970s SAFCOL EDEN received urchins from divers for trial roe testing and export

1980s NSW Abalone Co-op included sea urchins from three species on all their marketing documents that primarily targeted the lucrative Japanese uni market (urchin roe)

Research projects on distribution, biology, ecology and habitat were also underway by Prof. T. Underwood and N. Andrew (Sydney University).

Scoresby Shepherd was also including observations on urchin habitation at Gabo Island Victoria during his targeted abalone research for the eastern Zone Victorian abalone fishery.

Mallacoota Abalone fishermen's co-operative brought in a team of Korean processors to process *C. rodgersii* harvested from Victoria and southern NSW, targeting the Japanese uni market.

1990s Industry supported, part funded and participated in research projects into the interactions of *C. rodgersii* on abalone and their shared habitats. (FRDC N. Andrew

et al)

This research followed with research into roe quality improvement aimed at the uni markets in Japan. (Blaunt et al).

Cerbin P/L set up an urchin processing plant in Batemans Bay exporting to Japan and the small domestic market.

Further investment followed from South Coast Sea Urchins (Eden and Pambula NSW south Coast) and Sea Urchin Harvest at Batemans Bay.

These companies invested in the dive and processing sector.

The growing domestic market was the target of their businesses and has demonstrated the value of a sustainably managed harvest sector and a growing market.

Appendix #2 *C rodgersii* and the environment

1964 research comment re interactions

1970s Scoresby Shepherd Gabo Island

1980s Warwick Nash Salt Lake “warnings

1980s Underwood Andrew

1990s Andrews FRDC Industry \$ and time

1990s Blaunt

2000 South Coast Sea Urchins began diving and processing *C rodgersii* in Eden, later moved to expanded premises in Pambula

2000s Diver documentation of urchin harvested areas following an increase in harvesting by commercial fishery.

2015 FRDC TRF funded small experimental density reductions of *C rodgersii* in abalone fishing areas. (D Worthington)

2020 AANSW OCEANWATCH partnership in Plague To Profit

<https://www.oceanwatch.org.au/urchin-barrens/>


2022 ongoing monitoring and support for research into the sustainable harvest of urchins in NSW and the use of digital loggers on vessels when harvesting sea urchins.

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Alan Wilson
April 20, 2020 ·

This photo was in 1977 when I first came to bay diving for sea urchins that's Neville Thrower in the boat
my fellow Tony Duckett deceased

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