Commercial Prospects for Long spined sea urchin industry (*Centrostephanus*) in Tasmania

By RTS Paua Co.
## Agenda

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2018-2019 Processed long spined sea urchin (*Centrostephanus rodgersii*) By RTS
And 2020 Centro plan for Sustainable Fishery

As a % of total processed QTY from each year

<table>
<thead>
<tr>
<th>Month</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
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<tbody>
<tr>
<td>Jan</td>
<td>9%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>Feb</td>
<td>10%</td>
<td>9%</td>
<td>12%</td>
</tr>
<tr>
<td>Mar</td>
<td>13%</td>
<td>11%</td>
<td>16%</td>
</tr>
<tr>
<td>Apr</td>
<td>16%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>May</td>
<td>25%</td>
<td>25%</td>
<td>18%</td>
</tr>
<tr>
<td>Jun</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Jul</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Aug</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Sep</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Oct</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Nov</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Dec</td>
<td>16%</td>
<td>0%</td>
<td>0%</td>
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</tbody>
</table>
2019 Harvested Sea urchin Tonnes as a % from total QTY by RTS - Zone Wise

- NORTH EASTERN: 73.5%
- CENTRAL EASTERN: 25.8%
- SOUTH EASTERN: 0.7%
Industry Challenges

- Manufacturing
  - Labour intensive process
  - Skilled & Efficient Labour
  - Specified Facility, Materials & Techniques
  - Weather
  - Dive Zones & fish quality
  - Toxins
  - Wild Fishery

- Waste
  - Shell Waste
  - Roe Waste
  - Urchin Sludge
  - Waste water treatment
  - Weight loss
  - In & Out freight Cost
  - Specific Temperature
  - Storage

- Market
  - Competitive export market
  - Established market in Asia
  - Country specific requirements
  - Domestic market
  - Research & Development
  - Testing Cost
  - Literature on TAS fishery

- Environmental

- Supply Chain

- Science & Technology
Industry Challenges - Manufacturing

- Labour intensive process
- Skilled & Efficient Labour
- Specified Facility, Materials & Techniques
Industry Challenges - Waste

- Shell Waste
- Roe Waste
- Urchin Sludge
- Waste water treatment
Our Destinations – 10 Countries across the world

- Canada
- Chile
- Russia
- USA
- Mexico
- Japan
- Korea
- Peru

Market Leaders & Consumers

- 80-90% for Japan Market

Industry Challenges - Market

- Competitive export market
- Established market in Asia
- Country specific requirements
- Domestic market

Dependent factors for Price

- Appearance, Colour & Quality
- Species & Region of harvest
- Flavours & Textures
- Demand & Distribution
- Form & Processing

Tasmanian A

Canadian A

HOKKIDO HIGASHIZAWA B

HOKKAIDO HADATE B
## Industry Challenges – Market Expectations

<table>
<thead>
<tr>
<th>AB</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>Dry, Light, Smooth</td>
<td>Glossy, Slight Dark</td>
<td>Red Spots/Patches</td>
</tr>
<tr>
<td>Dry, Light, Rough</td>
<td>Glosy, Light, Rough</td>
<td>Black Spots/Patches</td>
</tr>
<tr>
<td>Glossy, Light, Rough</td>
<td></td>
<td>Dark/Black Spots</td>
</tr>
<tr>
<td>Dry, Light, Rough Pieces</td>
<td>Dry or Glossy, Slight Dark, Rough or Smooth</td>
<td>Slightly wet or wet</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dark</td>
</tr>
</tbody>
</table>

**Finished Product Quality**

- A
- B
- C
- Weather
- Dive Zones & fish quality
- Toxins – Biotoxin
- Wild Fishery
Industry Challenges - Supply Chain

- Specific Temperature requirements during transport
- In & Out freight Cost
- Transport & holding storage capacity issues
- Weight loss
Industry Challenges - Science & Technology - Opportunities

- Research & Development
- Testing Costs: expensive
- Literature on TAS fishery

- New products from waste
- Organic fertilizer, neutraceuticals
Summary

- Barriers to market entry are considerable:
  - Financial, staffing, markets and profitability.
  - Maintaining a sustainable harvest to ensure future supply while balancing with the environmental needs.

What’s needed from the government:

- Allow harvesting rather than kill and leave in the water.
- Help to ensure that the investment in processing can be recovered ($2.5 million to date) by harvesting and using waste products (creates jobs and new markets)
Long Spine – Delicacy