# Working Group: Long-nosed fur seals in the Coorong and Lower Lakes

Communique No. 17





The 18<sup>th</sup> meeting of the Long-nosed fur seal (LNFS) working group was held on 30 August 2019 in Adelaide.

The following representatives were present at the meeting:

- Sandy Carruthers, Executive Director Strategy, Science and Corporate Services, Department for Environment and Water (DEW) as Chair;
- Prof. Simon Goldsworthy, Sub Program Leader Ecosystem Effects of Fishing and Aquaculture, South Australian Research and Development Institute (SARDI);
- Cr Karyn Bradford, Alexandrina Council
- Faith Coleman, proxy for Craig Wilkins, Conservation Council SA (CCSA)
- Michael Garrod, Director Community Engagement, DEW
- Cr Tracey Hill, Coorong District Council
- Dr. Karl Hillyard, Team Leader Abundant Species, DEW
- Lisien Loan, A/Director Conservation and Wildlife, DEW
- Dr. Belinda McGrath-Steer, Fisheries Manager, Primary Industries and Regions SA (PIRSA)
- Merilyn Nobes, proxy for Neil MacDonald, Southern Fishermen's Association (SFA)
- Dr. Peter Shaughnessy, Honorary research associate, South Australian Museum
- Claire Stephenson, Manager Community engagement, SA Murray-Darling Basin NRM Board; and
- Renate Velzeboer, Ecologist Wildlife and Biosecurity, DEW.

The South Australian Tourism Commission and SA Water representatives were apologies.

#### Invited guests:

- Lisa Carlin, BDO Econsearch
- Dr. Jason Earl, SARDI
- Zane Skrypek and Adrian Phillips, commercial Lakes and Coorong fishers

# Research and management of seal-fisher interactions

- SARDI provided a verbal update on the research project 'Seal-fisher-ecosystem interactions in the Lower Lakes and Coorong: understanding causes and impacts to develop longer-term solutions', which has been principally funded by the Fisheries Research and Development Corporation (FRDC). The total cost for this research project is \$300,000. It is supported with in-kind contributions by SARDI, PIRSA, SFA and DEW; and a cash contribution of \$66,000 by the DEW.
- The research project seeks to assess the economic and ecological impacts of LNFS on the commercial Lakes and Coorong Fishery and ecosystem, and identify further options for mitigating their impacts and reducing the attractiveness of the region as a place for LNFS to visit. It will utilize a range of methods to improve information on seal-fisher-ecosystem interactions. This includes an electronic reporting system for fishers to collect data on seal interactions and impacts; surveys to identify seal-haul out areas; and satellite tracking and dietary investigation to determine where, when and on what LNFS are predating; and ecological modelling. This research project commenced in April 2019.
- Population surveys are continuing (see below) and diet analysis for seals, birds and fish is underway to determine what they are consuming.
- SARDI is planning to deploy satellite trackers on several LNFS from the Coorong to track their movement.

- DEW presented on the use of the Seal Control Units (SCU) by the commercial Lakes and Coorong fishery (LCF). One fisher has renewed their permit for this calendar year.
- The LNFS working group discussed community concerns about the impact of LNFS on other fauna, particularly pelicans, in the Lower Lakes and Coorong.

### **Economic impacts**

- BDO Econsearch presented on the Economic inidicators for the commercial Lakes and Coorong Fishery. Between the period of 2008/09 and 2017/18, of the top five species (Bony Bream, Callop, European Carp, Yellow-Eye Mullet and Mulloway) only Callop and Mulloway experienced a slight rise in catch. European Carp and Bony Bream saw a decrease in gross value production, which is driven by catch and price of fish, and Callop saw a decrease in price. In 2012/13, Callop experienced a drop in gross value production and price when all other species were experiencing a rise.
- Over the same period the number of Net and Pipi licences decreased and the number of net only licences increased and in 2015/16 the number of Net only licences was larger than the number of Net and Pipi licences.
- Between 2011/12 to 2016/17, the cost of management was on an increasing trend decreasing slightly in 2017/18, with significant subsidies from PIRSA from 2015/16 to 2017/18.
- Income and profit indicators, licence value and return on total capital and on fishing gear and equipment all decreased over the period between 2011/12 and 2017/18, with profit at full equity, return on total capital and return on fishing gear and equipment becoming negative in 2014/15 and 2017/18.
- Yearly reports can be found on their website: <u>www.bdo.com.au/en-au/econsearch/safisheriesreports</u>

## Monitoring the abundance and distribution of LNFS

• The DEW provided working group members with a summary on monitoring of the abundance and distribution of LNFS in the northern lagoon of the Coorong, which was conducted every 4-6 weeks for four years between August 2015 and August 2019 (See Figure 1).

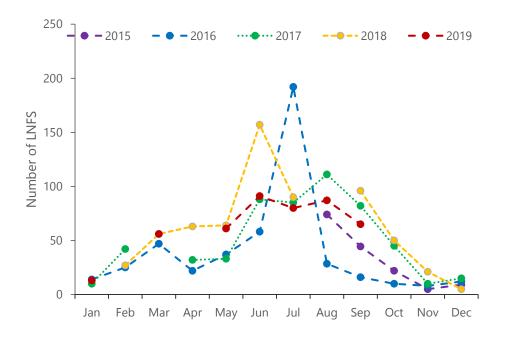


Figure 1. Number of LNFS' in the northern lagoon of the Coorong by year from August 2015 until August 2019.

- The LNFS abundance appears to be similar during the four years of monitoring and reflects the seasonal
  variation typically observed in coastal water. That is, abundance peaks during the winter when some juvenile
  and sub-adult males move into coastal water to feed; and then the abundance declines prior to the
  commencement of the breeding season in summer.
- The highest number of LNFS counted peaked at 192 and 157 in July 2016 and June 2018, respectively and numbers were as low as five in November 2015 and December 2018.
- The majority of LNFS were generally observed at Tauwitchere and Goolwa barrages, except for monitoring conducted during the winter months when the majority of seals were found at or near the Murray Mouth.
- The LNFS working group discussed LNFS moving to other areas of the Coorong and lower lakes, which is
  not being monitored. The purpose of this monitoring is to determine trends in abundance and distribution
  of LNFS in the northern part of the lagoonand throughout the year. DEW is not intending to monitor the
  entire Coorong and lower lakes area. This is the area in the Coorong and lower lakes where the majority of
  LNFS are hauling out.
- If you are interested in volunteering for future monitoring trips, please register your interest by calling 0429 487 814.

#### **Further information**

Frequently asked questions, an option for the community to raise a question and the previous Communiques from the LNFS working group can be found on the DEW website: <a href="https://www.environment.sa.gov.au/seals">www.environment.sa.gov.au/seals</a>.