



A SNAPSHOT



NATIONAL SURVEY OF

RECREATIONAL FISHING FOR SOUTHERN BLUEFIN TUNA IN AUSTRALIA 2018/19



UNIVERSITY of
TASMANIA



Australian Government

Department of Agriculture,
Water and the Environment
ABARES

Since 1994, Southern Bluefin Tuna (SBT) *Thunnus maccoyii* have been managed internationally as a single breeding stock by the Commission for the Conservation of Southern Bluefin Tuna (CCSBT).

As a signatory to the international treaty CCSBT manages, Australia is required to account for all sources of SBT mortality within its territorial waters, including from recreational fishing.

SBT is a popular gamefish species in Australia, particularly along the south coast of Australia where juvenile SBT migrate seasonally. Occasionally, large adult fish are also caught by the recreational fishery.

Over the last two decades, the recreational fishery for SBT has focused in waters off South Australia, Victoria, Tasmania, New South Wales and Western Australia.



**TOTAL HARVEST OF SOUTHERN
BLUEFIN TUNA BY THE
RECREATIONAL SECTOR IN
AUSTRALIA**

This survey is the first comprehensive assessment of the recreational harvest of SBT in Australia.¹

This survey describes the fishing effort, harvest and released catch from South Australia, Victoria, Tasmania and New South Wales over a 12-month period from December 2018. It includes Western Australia's most recent recreational SBT catch estimates from DPIRD boat-based surveys.

For the national survey, data was gathered through onsite (boat ramp) surveys, offsite (phone) surveys, and charter boat fishing logbooks. The method used in each state was tailored to provide the most robust estimates.

Survey participation rates were very high, with outstanding engagement from the recreational fishing sector. Sampling rates were also high, and temporal and spatial coverage was comprehensive, which led to robust survey results.

These results will inform international SBT reporting, stock assessments and resource sharing arrangements between sectors.

Here is a snapshot of the survey results...

SOUTH AUSTRALIA

Fishing for SBT in South Australia spans the ocean coastline, with a focus on access points around Port MacDonnell, Victor Harbor and the Eyre Peninsula.

On-site survey methods were used to capture information about private-vessel recreational fishing activities targeting SBT in this State. These surveys were conducted at boat ramp access-points for trailer-vessels, which were identified by expert interview as having a high probability of use for SBT fishing. Charter boat catch data was recorded in a mandatory logbook.

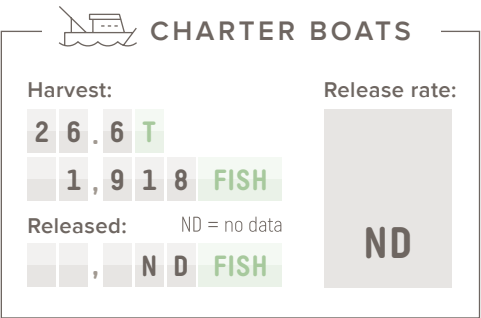
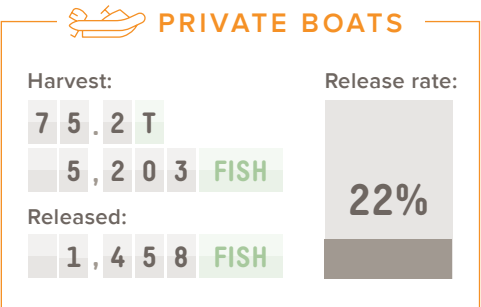
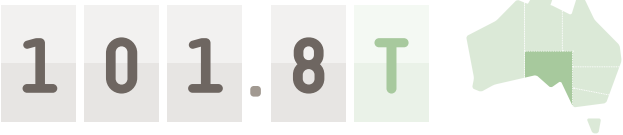
Surveys were conducted across seven regions at 17 boat ramps, with a 99.7% response rate over

754 sample days. This included a total of 8,713 interviews, of which 1,312 reported tuna fishing.

The estimated total harvested biomass of SBT in South Australia by the recreational sector was 101.8 tonnes. Of this, fishers from private boats caught 74%, with 26% caught from charter boats. The release rate for private boats was 22% or 1,458 fish.

The greatest percentage of harvested biomass from private vessels was caught from the Fleurieu Peninsula (41%), followed by Port MacDonnell (33%), Eyre Peninsula (20%), Yorke Peninsula (3%), Western Region (3%) and Kangaroo Island (1%).

Total harvest:



VICTORIA

In Victoria, the fishery is focused on the western coastline with a limited number of access points.

SBT is rarely targeted along the eastern coastline, with only occasional catches reported around the entrances of Port Phillip Bay and Western Port Bay.

On-site survey methods were used, as for South Australia. Charter boat catch was reported in a voluntary logbook, with 100% participation.

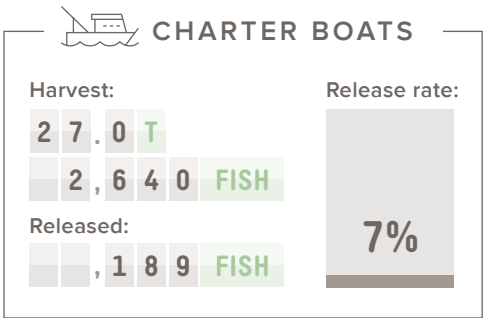
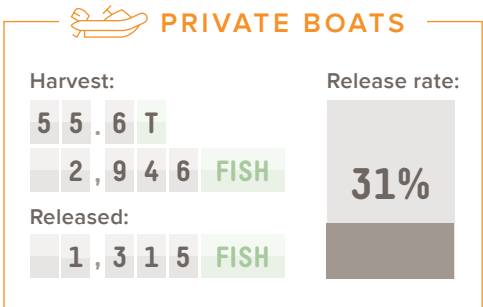
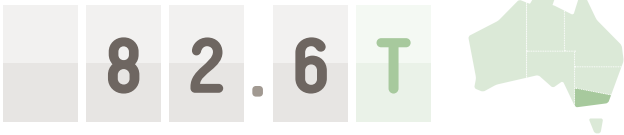
Surveys were conducted across two regions at five boat ramps, with a 99.7% response rate over

432 sample days. This included a total of 4,330 interviews, of which 1,513 reported tuna fishing.

The estimated total harvest of SBT in Victoria by the recreational sector was 82.6 tonnes. Of this, fishers from private boats caught 67%, with 33% caught from charter boats. The release rate for private boats was 31% or 1,315 fish, and 7% for charter boats.

A total of 15,287 recreational fishing trips left the survey ramps, with 26% of all trips targeting SBT. Portland accounted for 82% of the harvested biomass, with regional West Victoria accounting for 18%.

Total harvest:



TASMANIA

Fishing for SBT in Tasmania is concentrated in the south-east, off the Tasman Peninsula.

SBT have also been reported as far north as Flinders Island and at Pedra Branca off the south coast, and occasional catches are taken off the west coast of Tasmania.

An off-site survey method was used in Tasmania. The results represent the game fishing activities of Tasmanian registered recreational vessels greater than 4.5 m in length, excluding yachts and personal watercraft.

Charter boat catch was reported in a voluntary logbook with a very high rate of participation.

The telephone-diary survey contacted 2,053 vessel owners of which 98% provided full responses related to their vessel usage. Of these, 641 were identified as likely to do in-scope fishing, with 91% completing the 12-month diary phase.

The estimated total harvest of SBT in Tasmania by the recreational sector was 48.4 tonnes. Of this, fishers from private boats caught 84%, with 16% caught from charter boats.

The release rate for private boats was 25% or 869 fish, and 41% (354 fish) for charter boats. Most SBT were caught from the south east of the State.

Total harvest:



PRIVATE BOATS

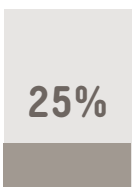
Harvest:



Released:



Release rate:



84%
private



CHARTER BOATS

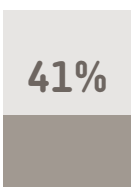
Harvest:



Released:



Release rate:



16%
charter

NEW SOUTH WALES

New South Wales has a diverse game fish fishery, with a long history of targeting large species of pelagic sharks, billfish and tuna.

SBT appear occasionally off the coast, only for a short time. The fishery occurs much further offshore and has different age cohorts than other States. Fish caught in NSW are, on average, significantly larger.

An off-site survey method was used in NSW with the results expanded to represent all one and three-year recreational fishing licence-holders in the State. Charter boat catch data was recorded in a mandatory logbook.

Through a telephone survey, 16,452 licence-holders were contacted, with 86% providing a full response. Only 2.9% of all licence-holders were estimated to have participated in game fishing for large pelagics, and just 0.6% targeted SBT during the survey period.

The estimated total harvest of SBT in NSW by the recreational sector was 29.8 tonnes. Of this, fishers from private boats caught 100%, with none caught from charter boats.

The release rate for private boats was 51% or 763 fish. Most catch occurred between Sydney and Bermagui on the NSW south coast.

Total harvest:



PRIVATE BOATS

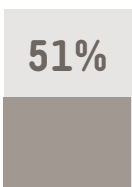
Harvest:



Released:



Release rate:



100%
private



CHARTER BOATS

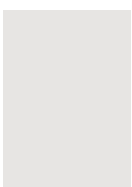
Harvest:



Released:



Release rate:



WESTERN AUSTRALIA

Western Australia's recreational fishery for SBT targets the small juvenile fish migrating down the coast from the spawning area in the Java Sea. These fish generally do not exceed 5 kg.

The Western Australian catch of SBT was not assessed in this study, rather the results from the recent state-wide boat-based recreational fishing survey was used in the national harvest estimate.

The Department of Primary Industries and Regional Development (DPIRD) conducted the most recent survey in 2017/18,² using an off-site phone-diary survey method, similar to the one used in Tasmania in this study.

Charter boat catch data was recorded in a mandatory logbook, with the 2017/18 period reported here.

The total harvested biomass was estimated at 7.9 t, with 96% of this taken by private vessels and the remainder from charter boats.

A further 782 fish were released from private vessels, resulting in a release rate of 32%. No fish were reported released from charter boats.

Most catch is taken from the southwest and south coast regions.

Total harvest:

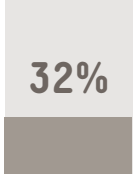


PRIVATE BOATS

Harvest:



Release rate:



Released:



96%
private

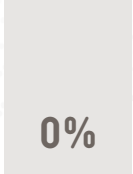


CHARTER BOATS

Harvest:



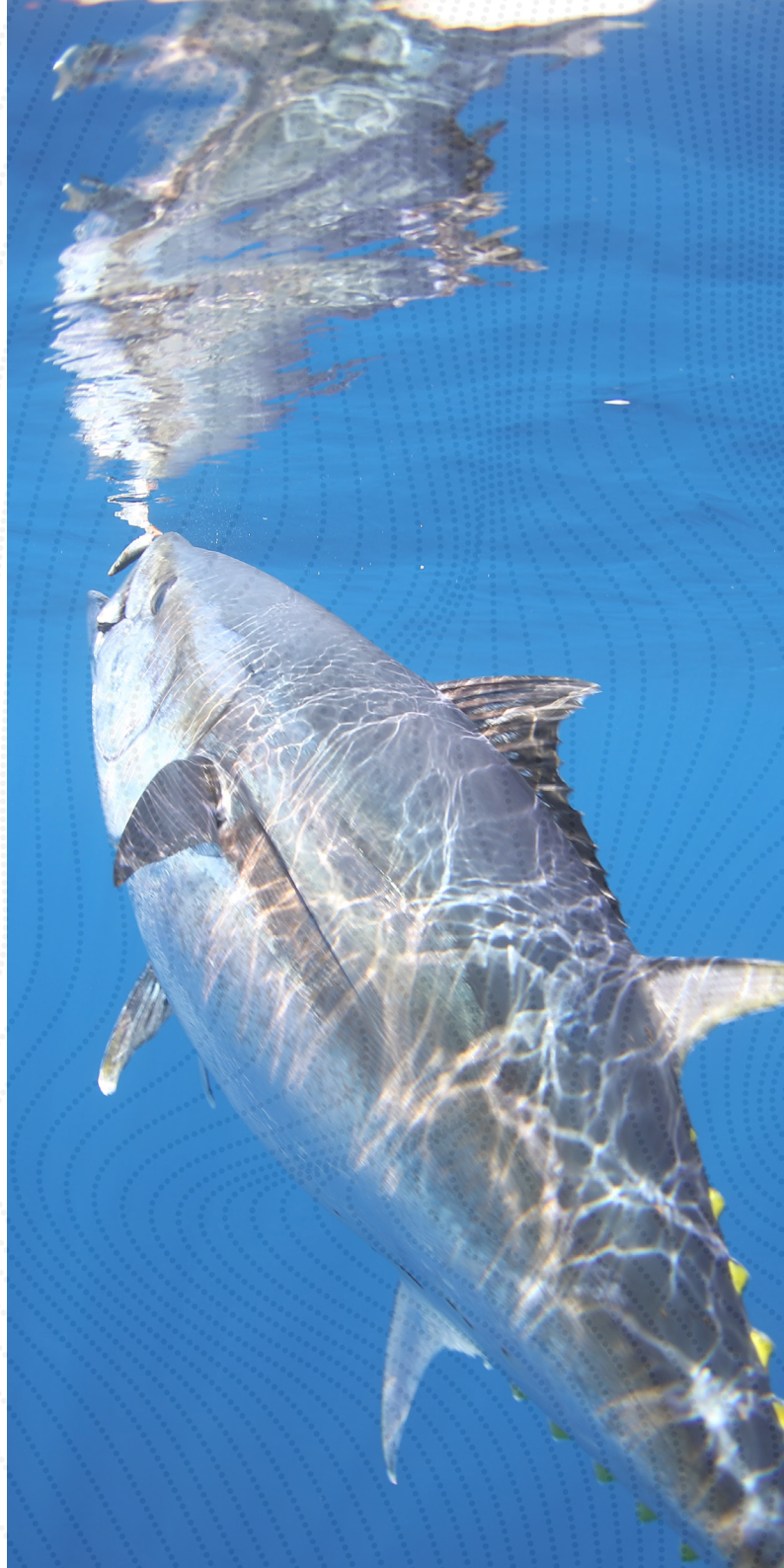
Release rate:



Released:



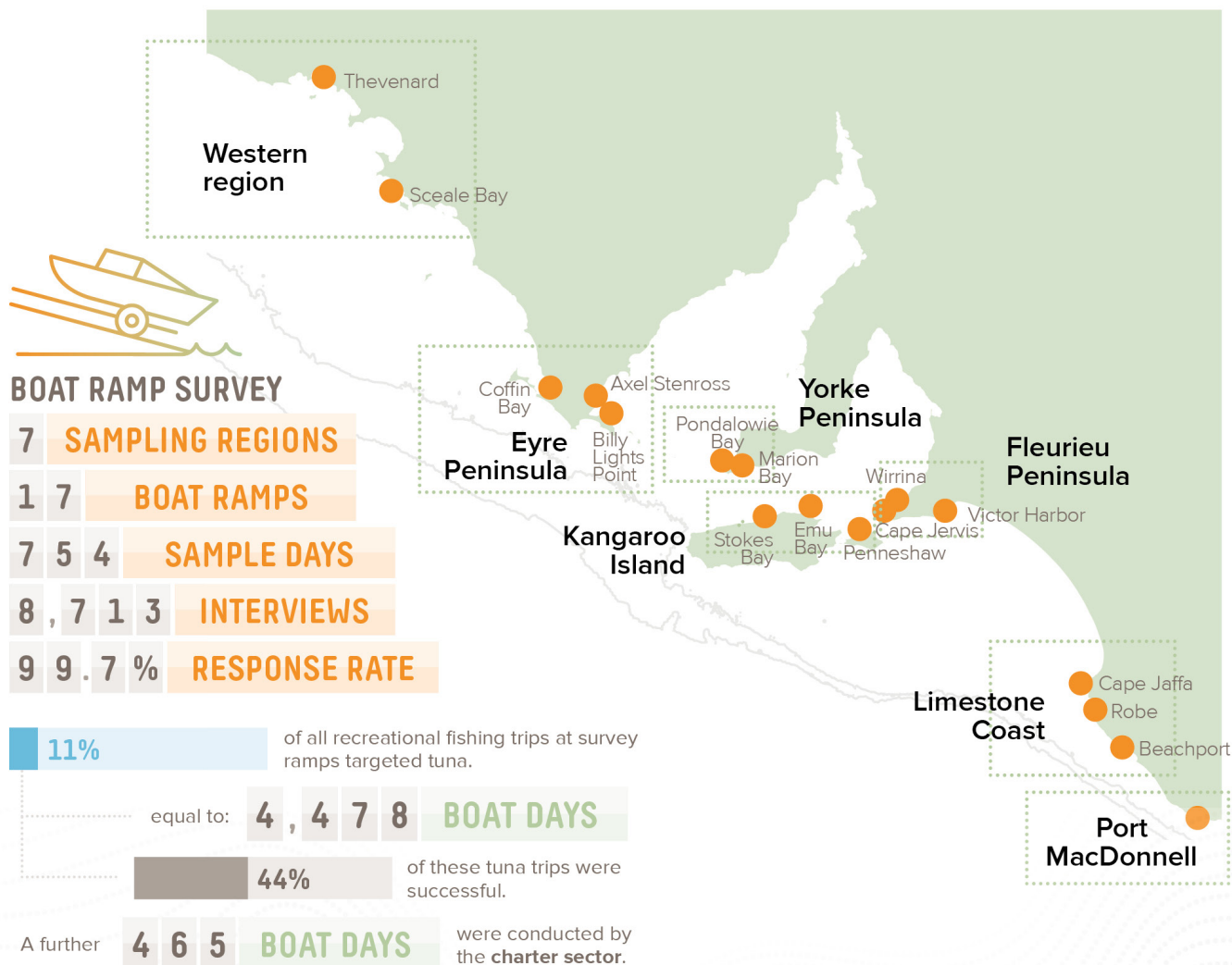
4% charter



SOUTH AUSTRALIA



This is the South Australian component of Australia's first assessment of the recreational harvest of Southern Bluefin Tuna (SBT). The survey was conducted from 1 December 2018 to 30 November 2019.



Read the report: tinyurl.com/SBT-Rec-Fishing-Survey



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SOUTH AUSTRALIA

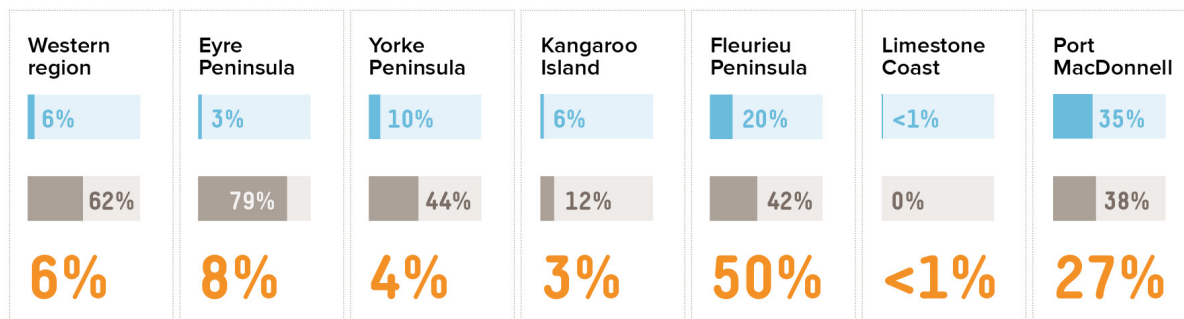


EFFORT

Percentage of all recreational fishing trips targeting tuna (from survey ramps)

Percentage of those trips that caught SBT

Percentage of total State tuna fishing effort



CATCH



PRIVATE BOATS

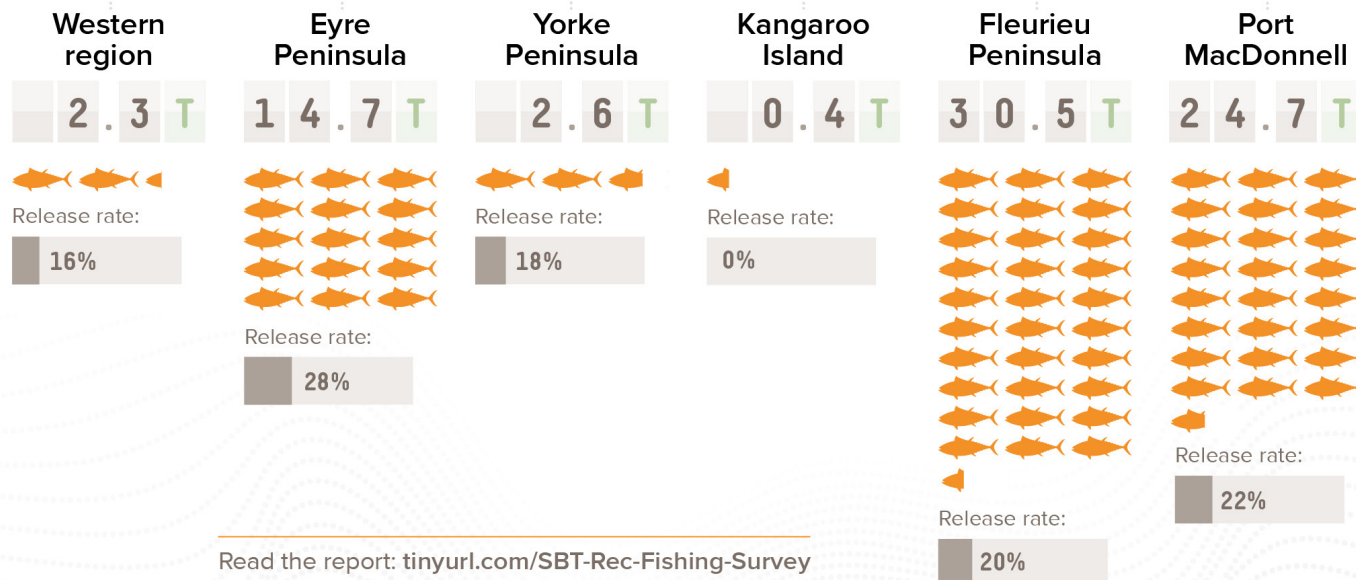


CHARTER BOATS

7 5 . 2 T

2 6 . 6 T

T = tonnes



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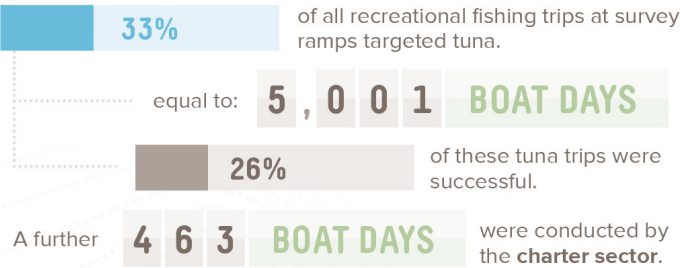
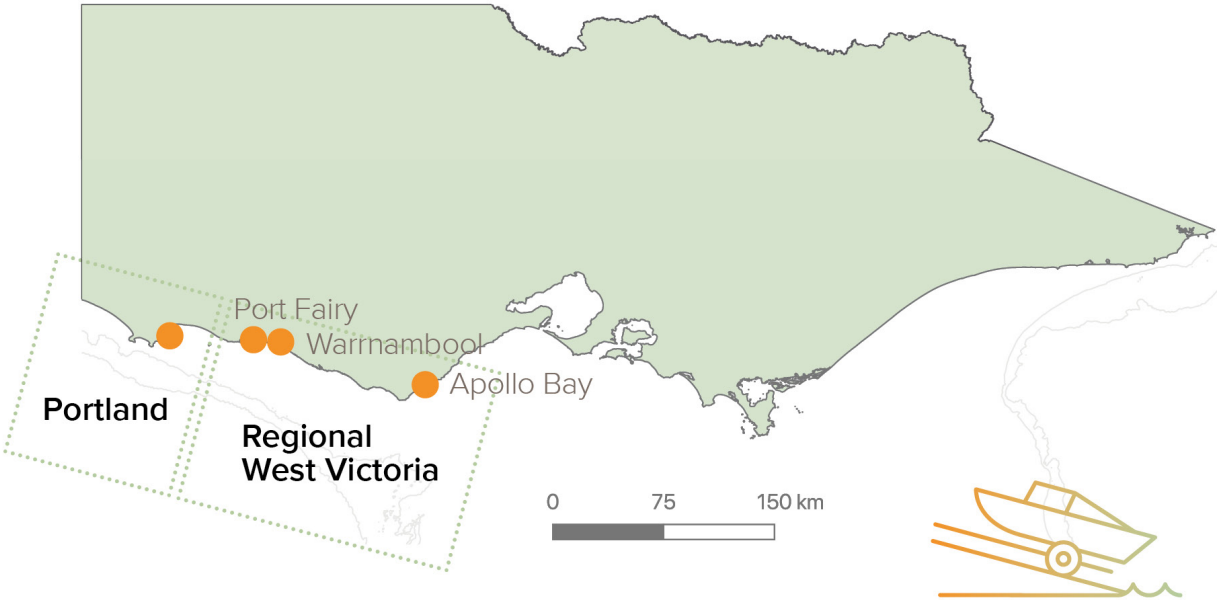


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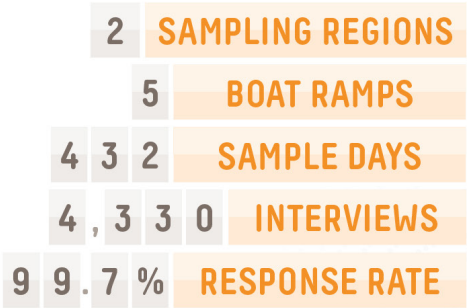
VICTORIA



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BOAT RAMP SURVEY



Read the report: tinyurl.com/SBT-Rec-Fishing-Survey



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VICTORIA

EFFORT

Percentage of fishing trips targeting tuna (from survey ramps)

Percentage of those trips that caught SBT

Percentage of total State tuna fishing effort

Portland



82%

Regional West Victoria



18%



CATCH

PRIVATE BOATS

5 5 . 6 T

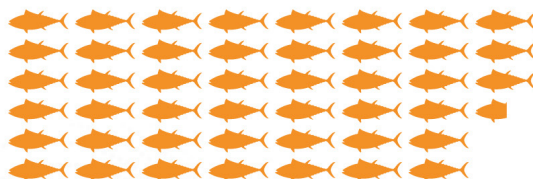
CHARTER BOATS

2 7 . 0 T

T = tonnes

Portland

4 5 . 6 T



Release rate:

26%

Regional West Victoria

1 0 . 0 T



Release rate:

43%

Read the report: tinyurl.com/SBT-Rec-Fishing-Survey

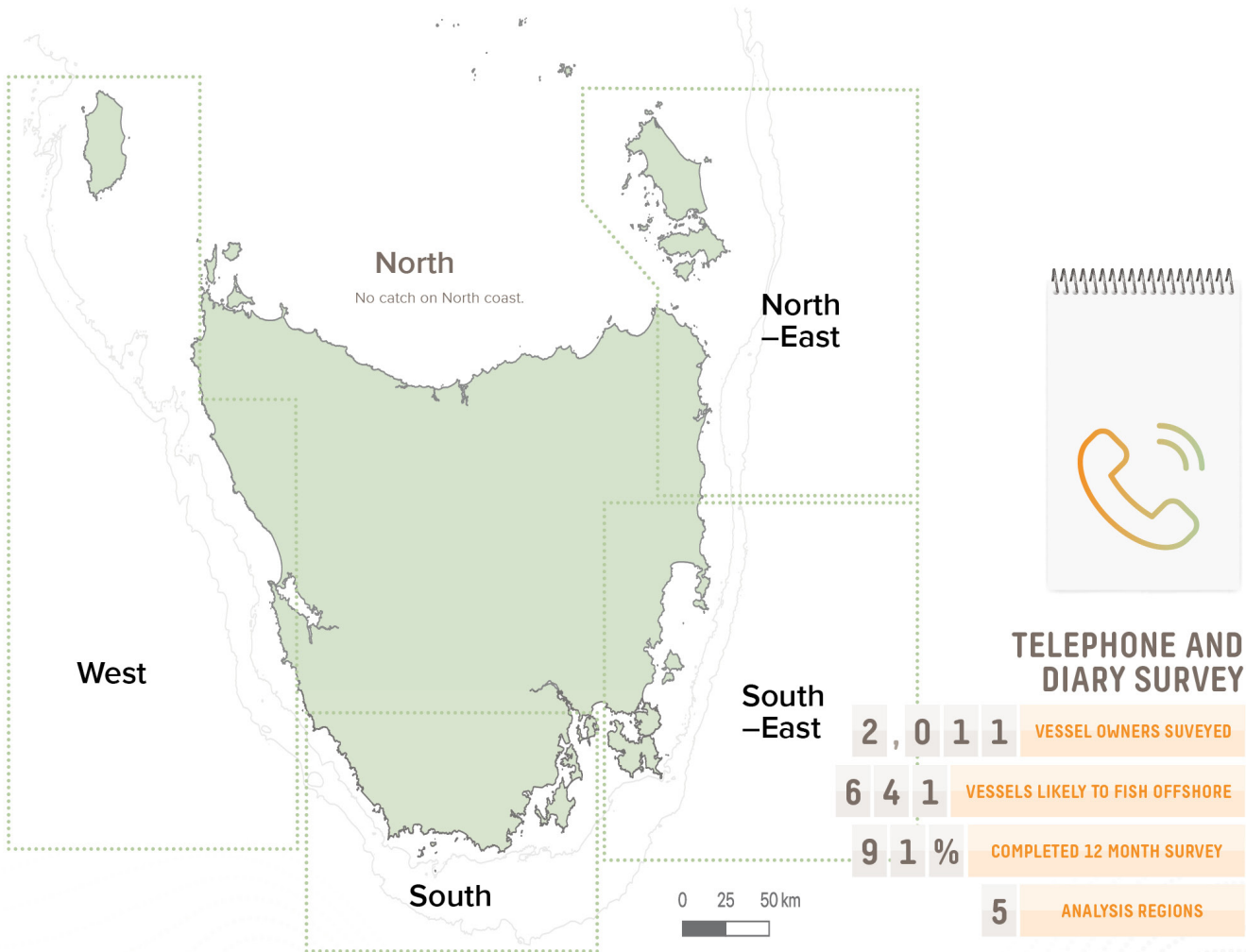


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TASMANIA



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NATIONAL SURVEY OF RECREATIONAL FISHING FOR SOUTHERN BLUEFIN TUNA IN AUSTRALIA 2018/19

TASMANIA

EFFORT



4, 5 8 1 **BOAT DAYS** (note multiple species targeted)

32%

of these tuna trips were successful.

Percentage of total State tuna fishing effort

A further

2 4 0 **BOAT DAYS**

were conducted by the **charter sector**.

North
-East

14%

, 6 3 8

BOAT DAYS

South
-East

74%

3, 3 9 6

BOAT DAYS

South

10%

, 4 6 8

BOAT DAYS

West

2%

, 7 8

BOAT DAYS

CATCH



PRIVATE BOATS

4 0 . 4 T



CHARTER BOATS

7 . 9 T

T = tonnes

North-East

2 . 5 T

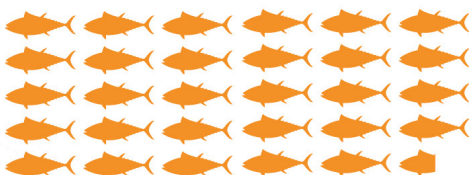


Release rate:

46%

South-East

2 9 . 4 T



Release rate:

21%

South

7 . 5 T



Release rate:

37%

West

1 . 1 T



Release rate:

0%

Read the report: tinyurl.com/SBT-Rec-Fishing-Survey

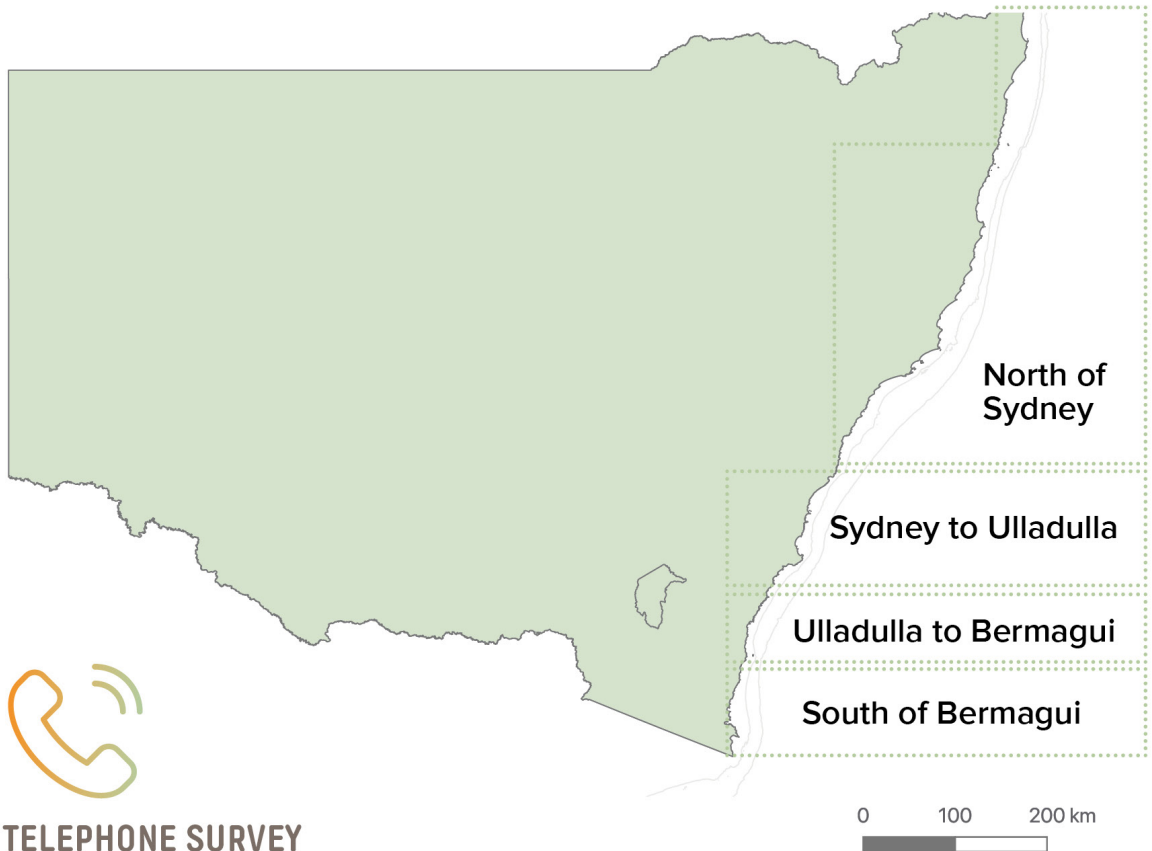


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NEW SOUTH WALES



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TELEPHONE SURVEY

1 6 , 4 5 2 LICENCED FISHERS INTERVIEWED

6 6 8 WERE GAME FISHERS

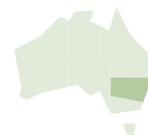
4 ANALYSIS REGIONS

Read the report: tinyurl.com/SBT-Rec-Fishing-Survey



NATIONAL SURVEY OF RECREATIONAL FISHING FOR SOUTHERN BLUEFIN TUNA IN AUSTRALIA 2018/19

NEW SOUTH WALES



EFFORT

1 0 , 6 7 0

FISHER DAYS

(note multiple species targeted)

Percentage of total State tuna fishing effort

North of Sydney

17%

1 , 7 9 8

FISHER DAYS

Sydney to Ulladulla

47%

4 , 9 7 6

FISHER DAYS

Ulladulla to Bermagui

27%

2 , 9 3 3

FISHER DAYS

South of Bermagui

9%

, 9 6 1

FISHER DAYS

CATCH



PRIVATE BOATS

2 9 . 8 T



CHARTER BOATS

0 . 0 T

T = tonnes

North of Sydney

1 . 0 T

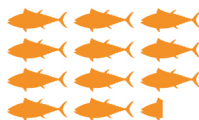


Release rate:

50%

Sydney to Ulladulla

1 1 . 3 T

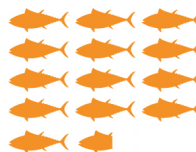


Release rate:

48%

Ulladulla to Bermagui

1 3 . 6 T



Release rate:

41%

South of Bermagui

3 . 7 T



Release rate:

73%

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tinyurl.com/SBT-Rec-Fishing-Survey



¹Tracey, S.R., Lyle, J.M., Stark, K., Gray, S., Moore, A., Twiname, S. & Wotherspoon, S. (2020). National survey of recreational fishing for Southern Bluefin Tuna in Australia 2018/19. University of Tasmania – Institute For Marine and Antarctic Studies, Hobart.

²Ryan, K.L., Hall, N.G., Lai, E.K., Smallwood, C.B., Tate, A., Taylor, S.M. & Wise, B.S. (2019). Statewide survey of boat-based recreational fishing in Western Australia 2017/18. Fisheries Research Report No. 297. Western Australia 195p.

