

Results from the Akaroa Harbour Recreational Fishing Survey 1997

*Ministry of Fisheries
Project REC9705*

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Akaroa Harbour Recreational
Fishing Survey 1997

J.D. Bell

Final research report for the Ministry of
Fisheries Project REC9705

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FINAL RESEARCH REPORT

REPORT TITLE	Results from the Akaroa Harbour Recreational Fishing Survey 1997
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AUTHOR J.D. Bell

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|----|----------------------|--|-------------------|
| 1. | PROGRAMME TITLE: | Akaroa Harbour recreational fishing survey | |
| 2. | PROJECT CODE: | REC9705 | |
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Beginning in December 1996, people fishing in Akaroa Harbour were intercepted at various key locations (boat ramps, wharves, holiday camps etc.), interviewed, and asked to keep a diary of their Akaroa Harbour fishing activities for the following 12 months. Pre-numbered diaries were given to fishers at the completion of their interview. In addition to the intercept interviews, the members of local fishing and diving clubs were interviewed by telephone and asked to keep a diary. Participating fishers were contacted every three months and asked to send in their fishing trip records (diary pages).

207 fishers were interviewed and agreed to keep a diary. The results from 1741 trips were obtained.

The main fish species targeted and caught were flatfish and red cod. The main fishing methods used were set netting for flatfish and rod/line fishing from a private boat when targeting red cod. Outside the harbour heads, the main target species was blue cod. From Wainui to Timutimu head the main target species was red cod, while from Duvauchelle Bay to Wainui the main target species was flatfish. The areas with the greatest intensity of fishing effort were Wainui, Akaroa and Barrys Bay.

6. OBJECTIVES

The programme objective was . . .

"To determine the areas fished, species caught, methods used and the catch per unit effort for the recreational fishery in Akaroa."

The survey obtained data from just under 1800 fishing trips representing over 9200 hours of fishing effort in Akaroa Harbour. The data collection instrument used a map to plot fishing activities and only those trip records with complete information were included in the analysis (less than 2.5% of all trip records were excluded). Fishers were phoned to clarify any records that required it. Through the use of local contacts and the local fishing club, the researcher was able to largely ensure that the most active fishers were included in the survey. The only sampling limitation was due to the poor weather that curtailed the fishing effort over the Christmas period, during which intercept interviews were carried out. Anecdotal evidence suggests that fewer "tourist fishers" (including families fishing from the wharf or small boats) were active during early 1997 when the survey began. Anecdotal evidence also suggests that

the total fishing effort made by the more active fishers was down on previous years, due to the rough weather making conditions unsuitable for boating and netting.

7. METHODS

Beginning on December 26 1996, people fishing in Akaroa Harbour were intercepted at various key locations (e.g. boat ramps, wharves), interviewed, and asked to keep a diary of their Akaroa Harbour fishing activities for the coming 12 months. Pre-numbered diaries were given to fishers at the completion of their interview. Interviews were carried out for 30 days (increased from the 20 originally proposed to compensate for the poor weather which reduced the number of fishers intercepted) and were completed by the end of March 1997. In addition to intercept interviews, members of local fishing and diving clubs were approached to keep diaries.

Trip records from the diaries were sent in every 3 months. Diarists were sent a newsletter and reminder at the completion of each 3-month period. Non-respondents were followed up with a phone call.

In their diary, fishers recorded the following:

1. The date of their trip.
2. The precise location(s) where they fished (a zone map was provided).
3. The number of hours they spent fishing.
4. The fishing methods they used.
5. The number of each species of fish they caught.
6. The species targeted.

A copy of the main pages from the diary is included in the appendix. Also included in the

appendix is a copy of the questionnaire used when interviewing the fishers at the time of intercept (or over the phone).

A total of 207 fishers were interviewed and agreed to keep a diary for the following 12 months. 1741 completed trip records were returned, describing over 9200 hours of fishing in Akaroa Harbour.

Returned trip records were edited by the researchers and any queries followed up with a phone call to the fisher. Results were analysed using the programme SPSS. Fishing location data was analysed by hand and also by coding into 19 different fishing zones for computer analysis. The location of each fishing zone is shown on all the figures in this report.

8. RESULTS

8.1 Profile of fishers participating in the study

Before being given a diary to keep, fishers were asked a few questions about their previous fishing activities in Akaroa Harbour, and a few questions about themselves. These results are presented below. 207 fishers participated in the survey.

Table 1: Sex of participating fishers

	Percent (n=207)
Male	95.2%
Female	4.8%
TOTAL	100%

Table 2: Age of participating fishers*

	Percent (n=207)
15 to 20 years	1.0%
21 to 30 years	4.8%
31 to 40 years	22.7%
41 to 50 years	23.7%
51 to 60 years	23.2%
61 years and over	19.8%
Not specified	4.8%
TOTAL	100%

*To be eligible for the survey fishers had to be at least 15 years old.

Table 3: Number of fishing trips made in Akaroa Harbour by participating fishers in the 12 months prior to being interviewed

	Percent (n=207)
No trips	0.5%
1 to 5 trips	5.3%
6 to 15 trips	26.1%
16 to 30 trips	40.6%
31 or more trips	25.6%
Not specified	1.9%
TOTAL	100%

Table 4: The number of other people that participating fishers usually go fishing with

	Percent (n=207)
No one else	1.0%
1 other person	6.3%
2 other people	35.7%
3 other people	29.0%
4 other people	22.2%
5 other people	1.0%
More than 5 other people	1.9%
It varies	2.9%
TOTAL	100%

Table 5: Fishing methods used by participating fishers in and around Akaroa Harbour in the 12 months prior to being interviewed

	Percent*
Rod or line from private boat	90.8%
Rod or line from charter boat	2.9%
Longline from private boat	2.4%
Rod or line from the shore	3.9%
Longline from the shore	0.5%
Diving from private boat	18.8%
Diving from charter boat	1.4%
Diving from the shore	1.4%
Dredging	2.9%
Set netting/gill netting	67.1%
Drag netting/beach seining	9.2%
Hand gathering	45.4%
Potting	3.4%
Spearing (flatfish)	2.9%

*This table totals more than 100% as respondents could indicate more than one method

8.2 Overview of the trips made by participating fishers during the 12-month duration of the study

Table 6: Months during which trips were made

	Percent of trips (n=1741)
January	20.1%
February	7.5%
March	24.3%
April	8.6%
May	5.9%
June	3.0%
July	2.8%
August	3.0%
September	3.5%
October	8.3%
November	3.0%
December	10.1%
TOTAL	100%

Table 7: The number of hours spent fishing on a trip*

	Percent of trips (n=1741)
0.5 hours	8.0%
1.0 hours	20.4%
1.5 hours	9.1%
2.0 hours	13.8%
2.5 hours	3.1%
3.0 hours	6.7%
3.5 hours	1.1%
4.0 hours	3.7%
(4.0) to 6.0 hours	3.1%
(6.0) to 8.0 hours	1.8%
(8.0) to 10.0 hours	3.5%
(10.0) to 12 hours	13.8%
(12.0) to 14 hours	4.6%
Over 14.0 hours	7.2%
TOTAL	100%

*Length of time to the nearest half hour. The time recorded for set netting and potting was the length of time the net or pot was in the water.

Table 8: Fish species targeted

Species	Percent of all trips (n=1741)
Red Cod	44.6%
Flatfish	30.9%
Blue Cod	16.1%
Blue Moki	4.8%
Greenbone/Butterfish	3.6%
Trumpeter	3.6%
Rock Lobster	3.6%
Jock Stewart	2.5%
Mussels	2.5%
Paua	1.6%
Mullet	1.3%
Wrasse	0.3%
Tarakihi	0.3%
Groper	0.2%
Warehou	0.2%
Kahawai	0.2%
Barracouta	0.1%
Others	0.6%

*This table totals more than 100% as respondents could target more than one species per trip.

Table 9: Number of species caught

Species	Number
Red Cod	4374
Kahawai	8
Blue Cod	537
Flatfish	4384
Trumpeter	100
Salmon	22
Tarakihi	49
Barracouta	66
Jock Stewart	382
Trevally	10
Groper	0
Mullet	503
Greenbone	276
Blue Moki	290
Spikey Dogfish	121
Wrasse	196
Rig	39
Warehou	45
Skate	77
Lobster	230
Mussels	1713
Paua	254
Pipi	0
Cockles	0
Paddle Crabs	41

Table 10: The type of fishing methods used

	Number of trips	Percent of trips
Rod/handline from private boat	817	46.9
Rod/handline/longline from charter boat	91	5.2
Longline from private boat	11	0.6%
Rod/handline from the shore	18	1.0%
Longline from the shore	0	0%
Diving from a private boat	88	5.1%
Diving from a charter boat	4	0.2%
Diving from the shore	7	0.4%
Dredging	0	0%
Set netting	657	37.7%
Drag netting	7	0.4%
Hand gathering	33	1.9%
Potting	2	0.1%
Spearing flatfish	6	0.3%
TOTAL	1741	100%

Table 11: Average length of time spent fishing using each fishing method*

	Average length of trip
Rod/handline from a private boat	1.7 hrs
Rod/handline from a charter boat	2.0 hrs
Rod/handline from the shore	2.0 hrs
Diving from a private boat	1.6 hrs
Set netting	11.2 hrs
Hand gathering	1.4 hrs

*This table has been limited to those methods used in at least 15 trips.

8.3 Areas Fished

The areas that fishing trips were made to are shown in the figures 1-4 that follow.

Figure 1 - The main fish species targeted in each zone and the percentage of trips in that zone targeting that species.

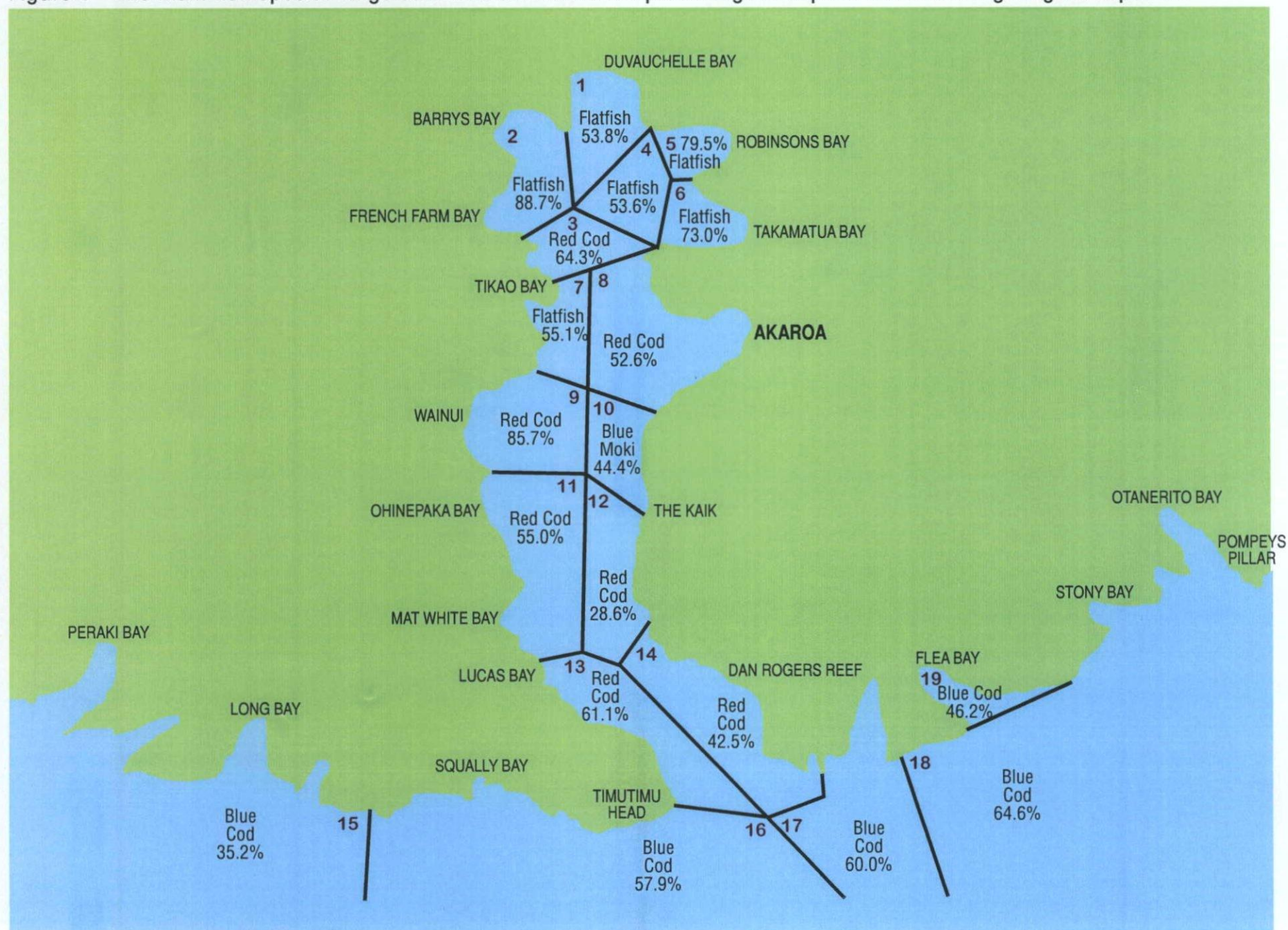


Figure 2 - The total number of trips made in each zone and that figure as a percentage of all trips made.

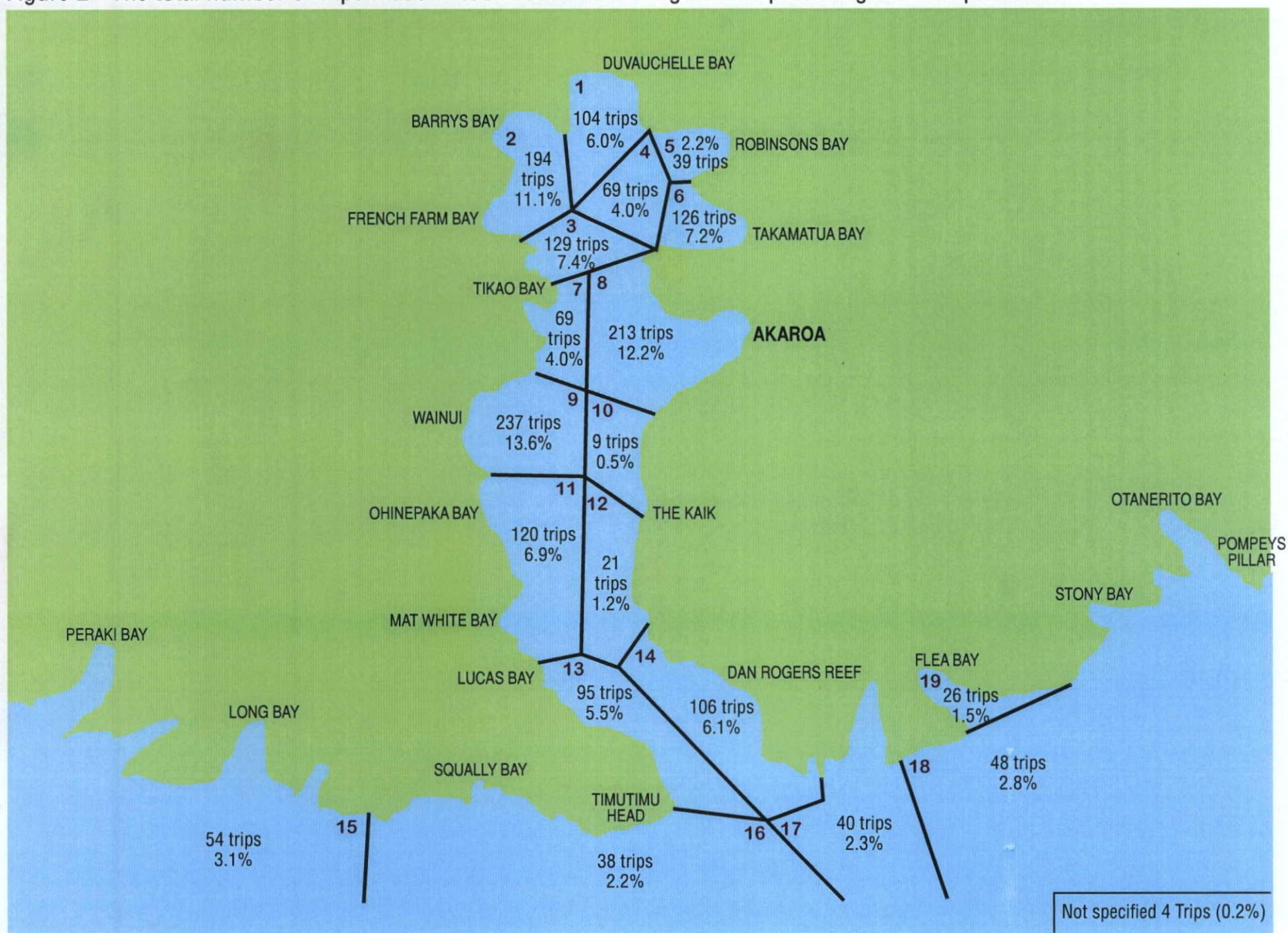
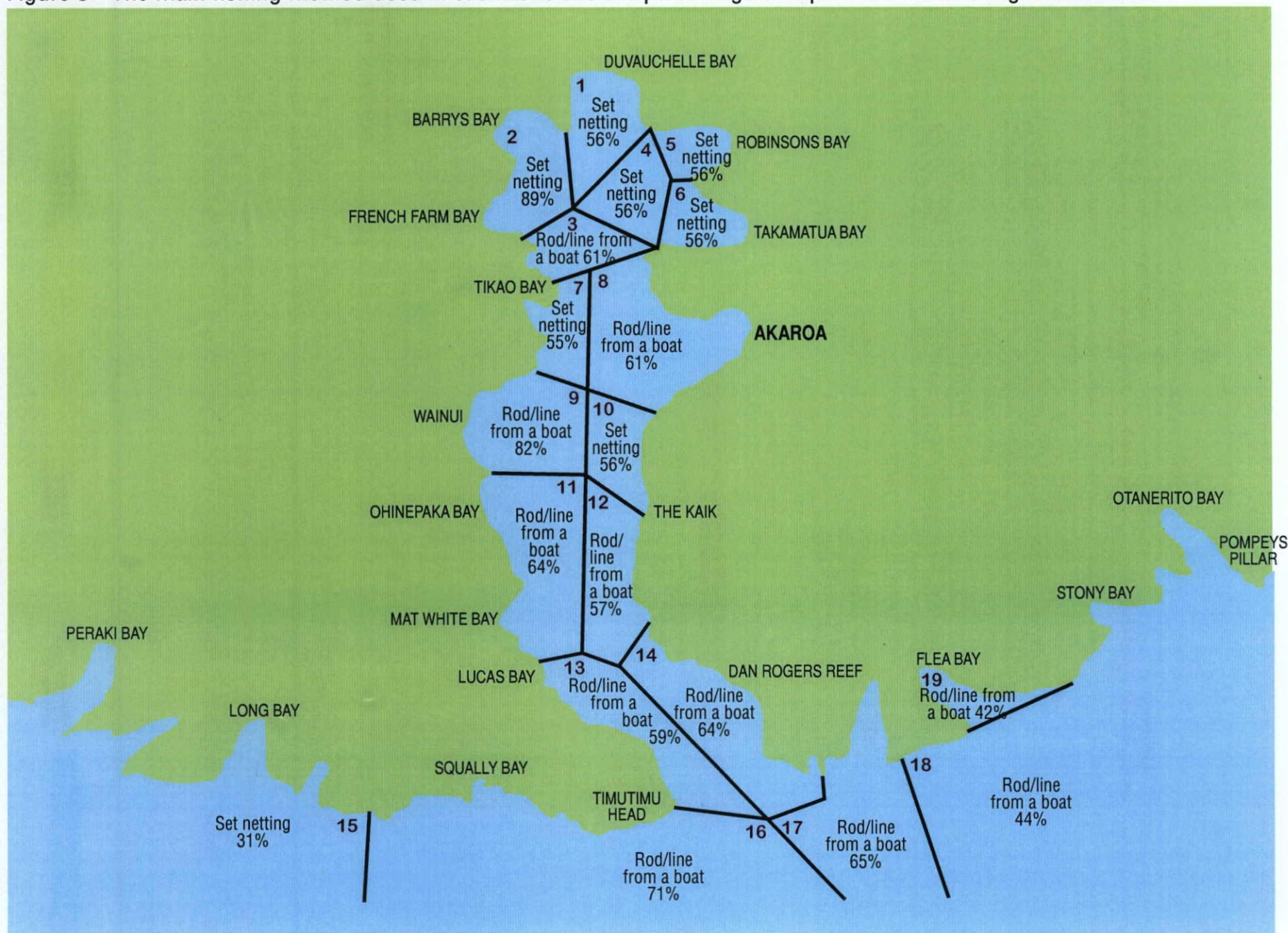


Figure 3 - The main fishing method used in each zone and the percentage of trips in that zone using that method.



8.4 Total number of each species caught by zone

The total numbers of each species caught in each zone are shown in figures 5 to 11 that follow.

Figure 4 - Average number of hours spent fishing (all methods) in each zone

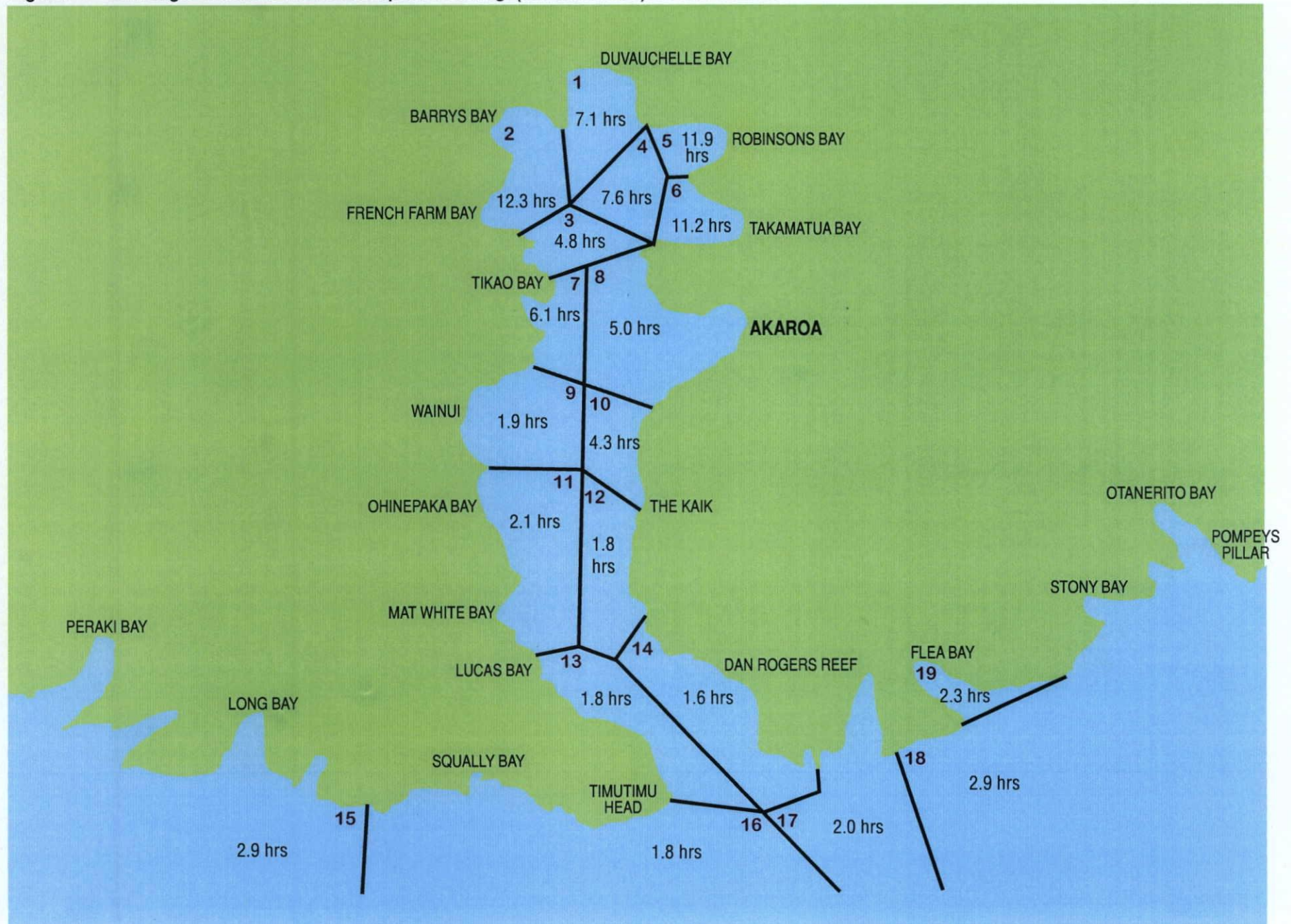


Figure 5 - Total number of red cod caught in each zone

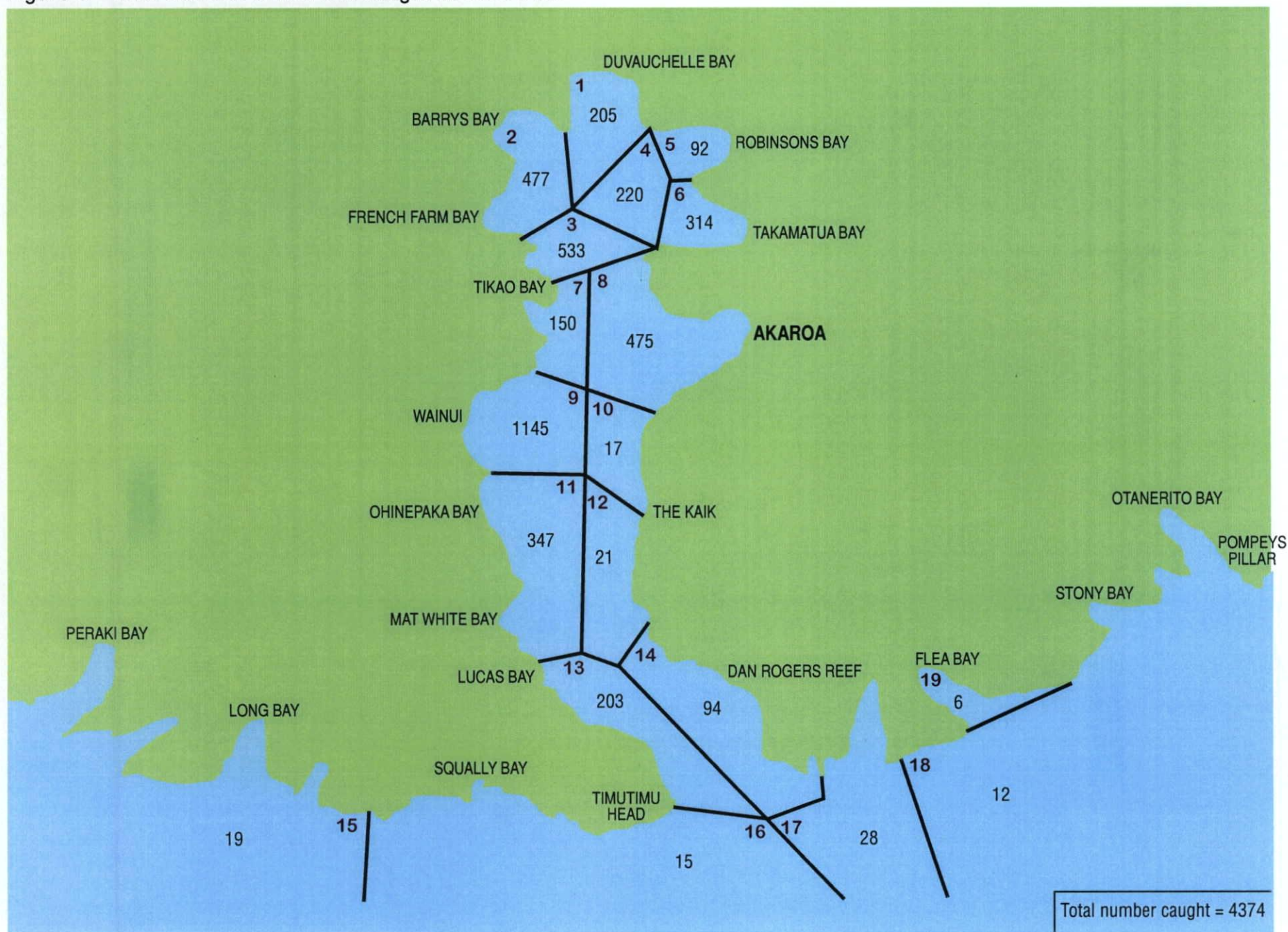


Figure 6 - Total number of flatfish caught in each zone

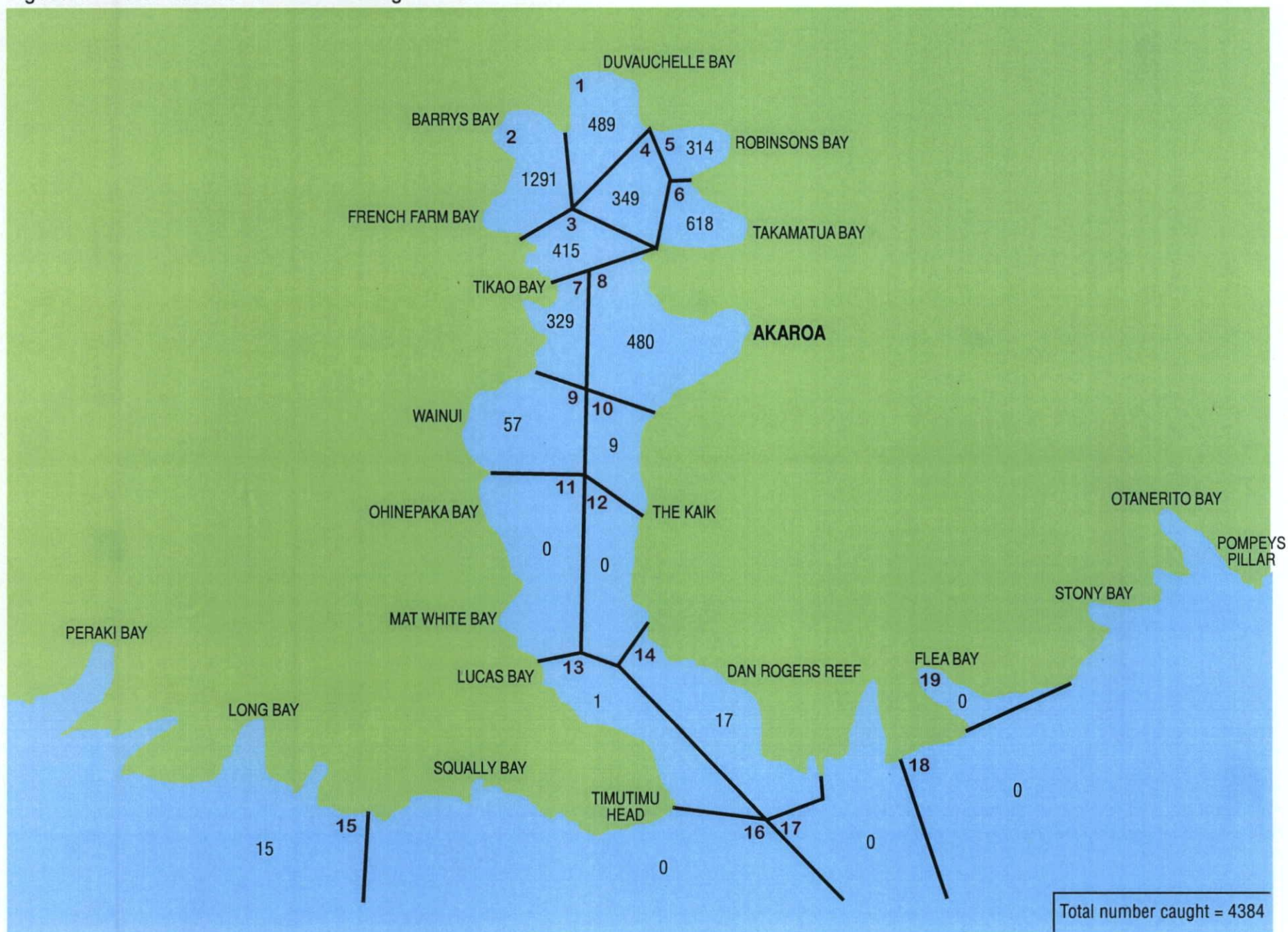


Figure 7 - Total number of blue cod caught in each zone

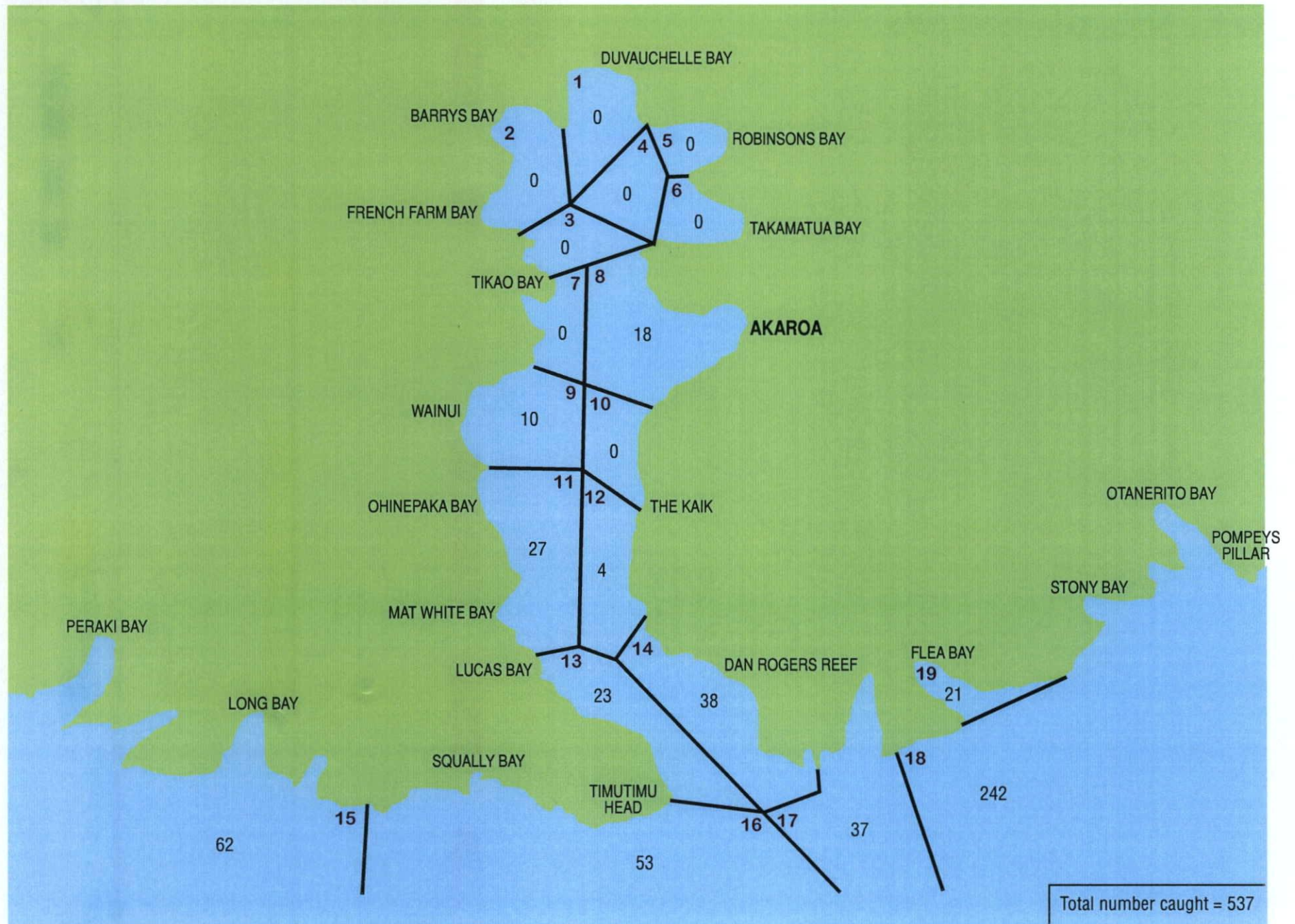


Figure 8 - Total number of blue moki caught in each zone

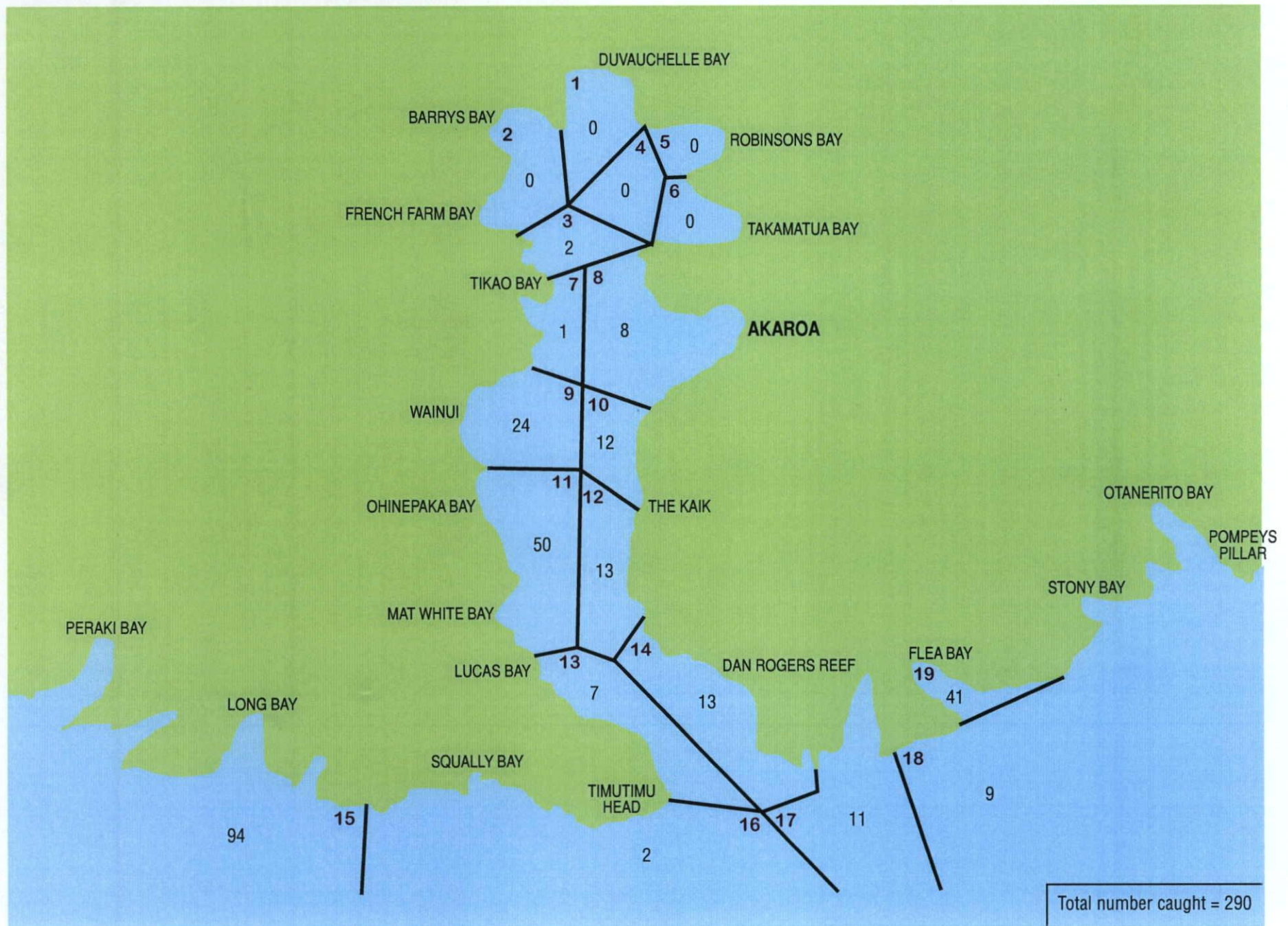


Figure 9 - Total number of greenbone caught in each zone

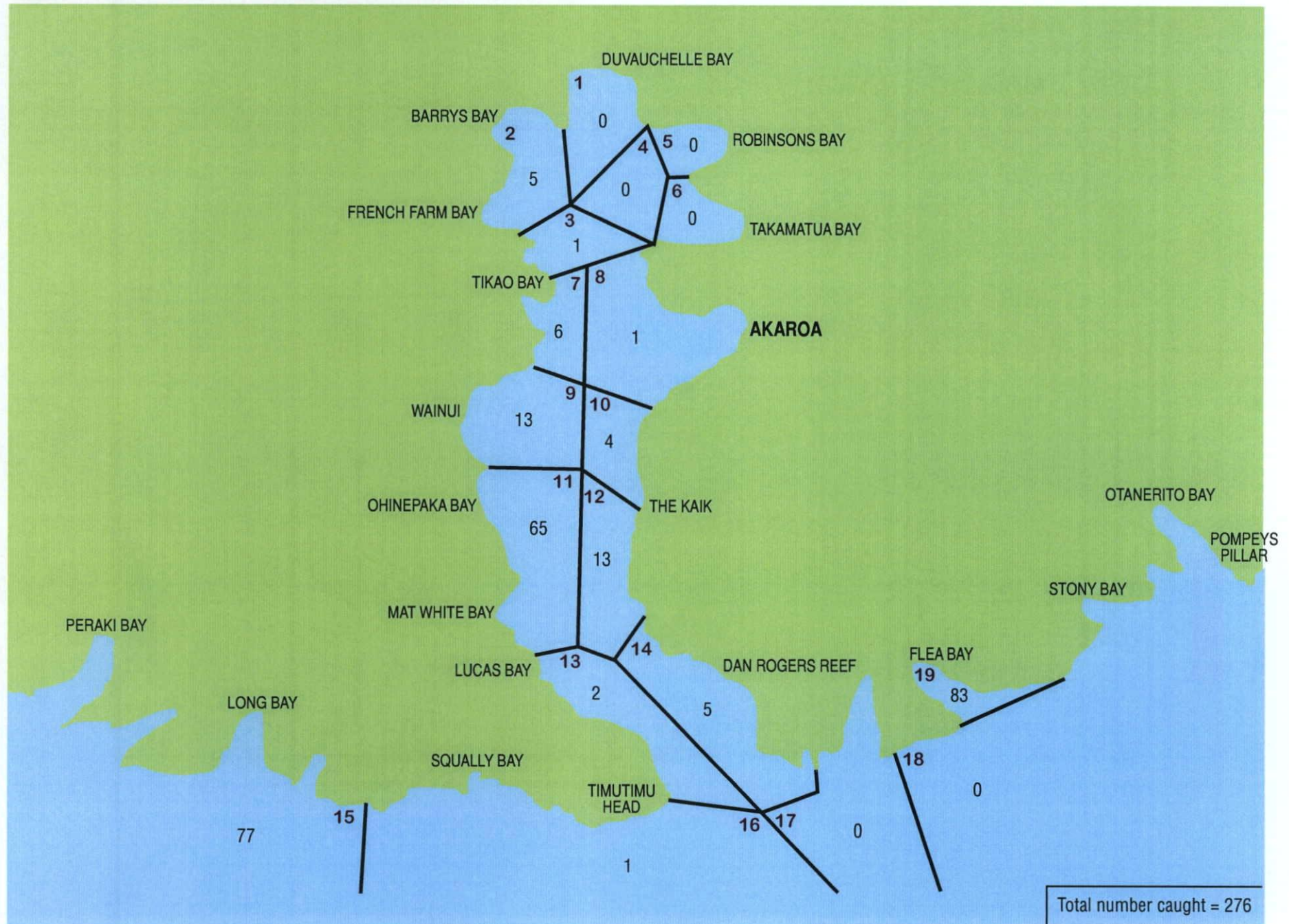


Figure 10 - Total number of rock lobster caught in each zone

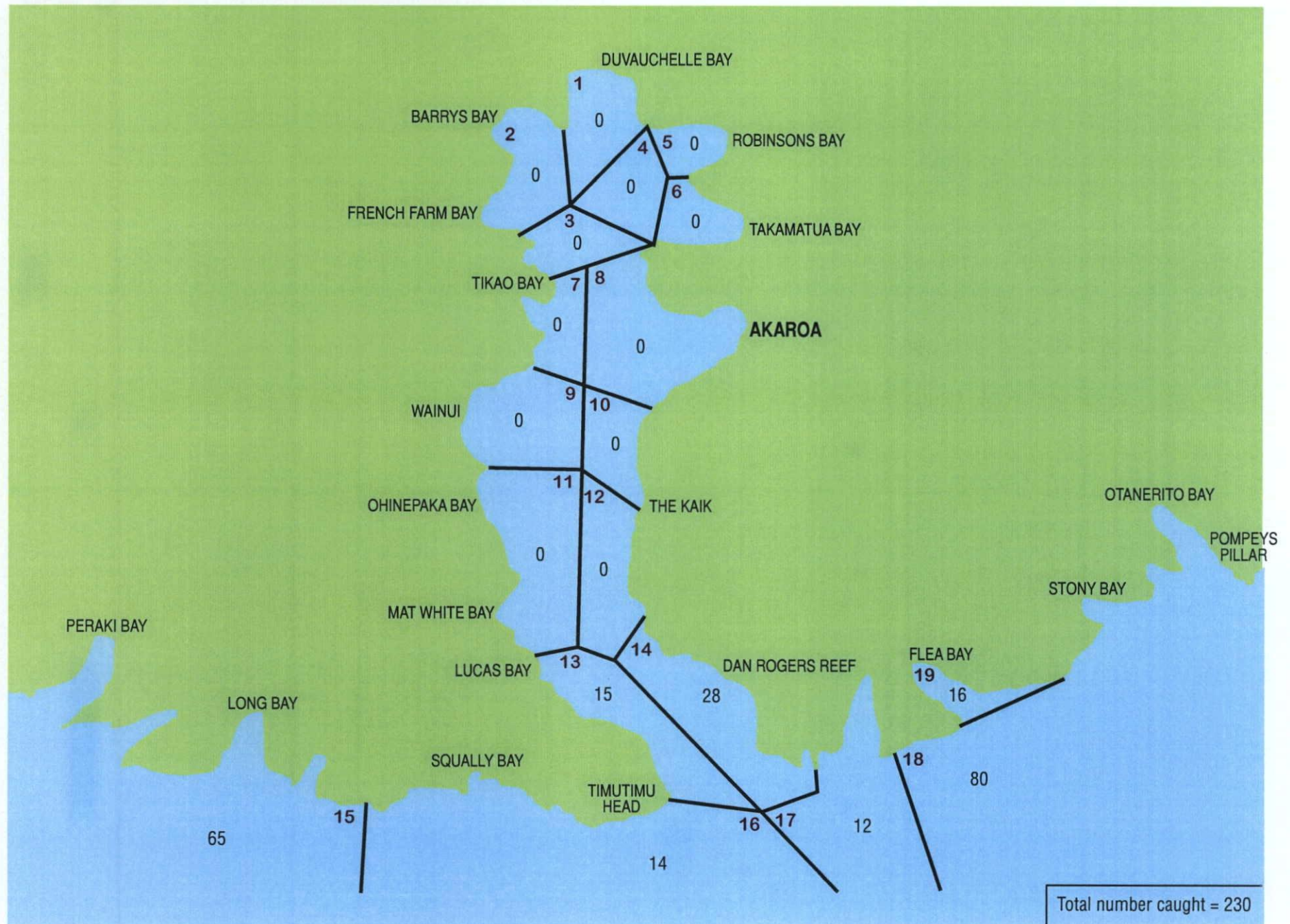
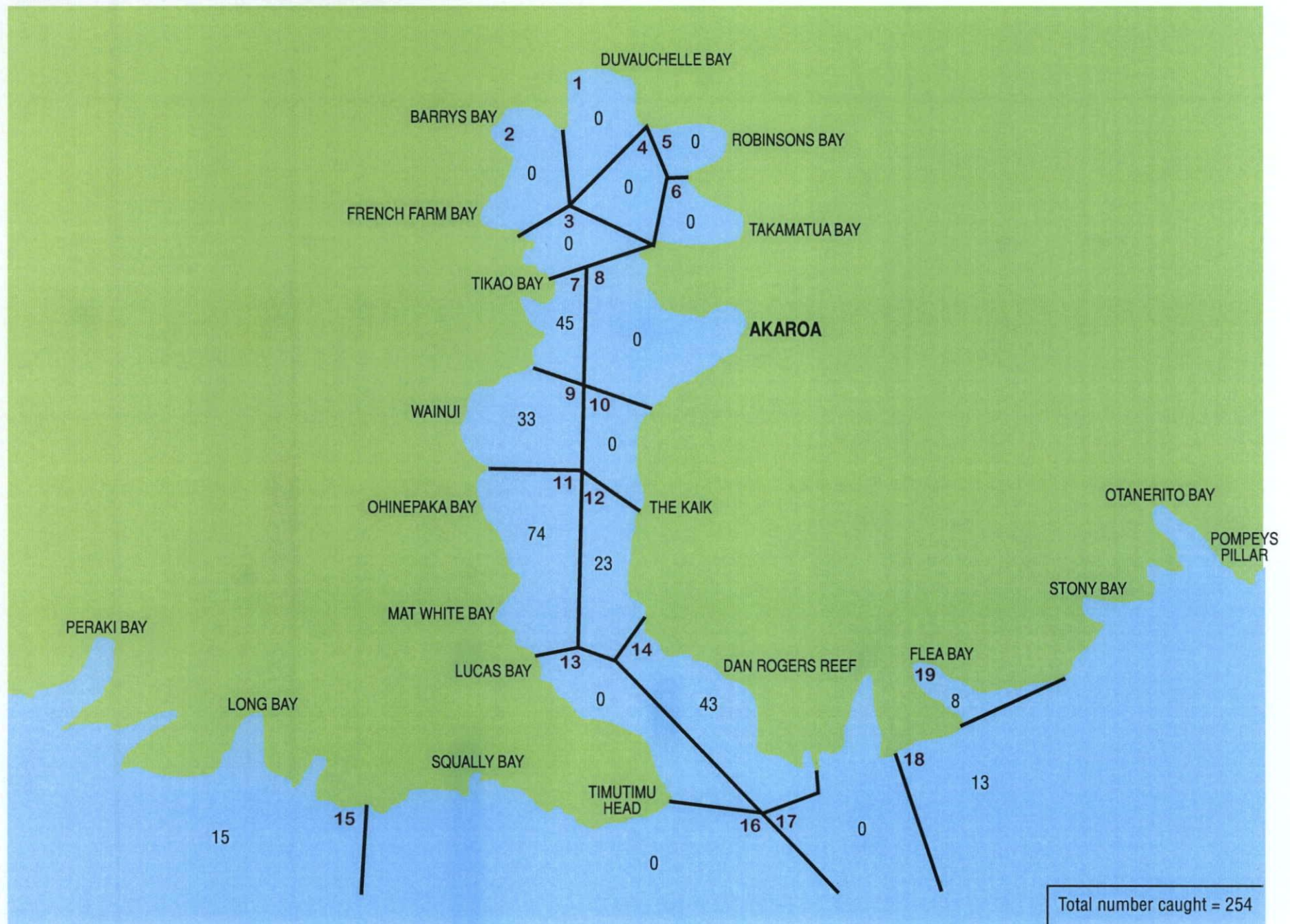


Figure 11 - Total number of paua caught in each zone



8.5 Location and intensity of each method used by zone

The location and intensity of each method used in each zone are shown in figures 12 to 16 that follow.

Figure 12 - Map showing location and intensity of "rod/line fishing from private boat" effort (n = 817 trips)

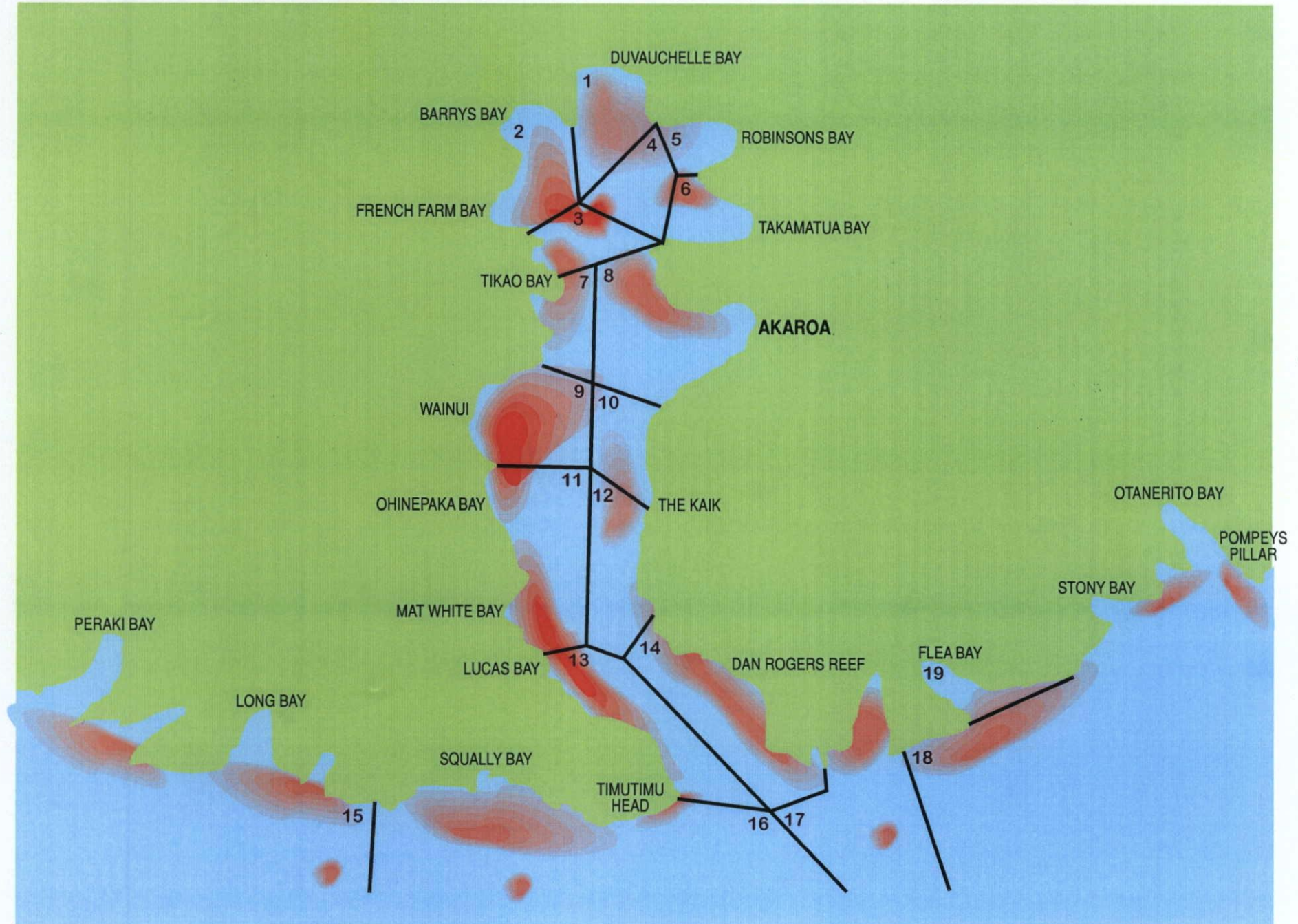


Figure 13 - Map showing location and intensity of set netting effort (n = 657 trips)

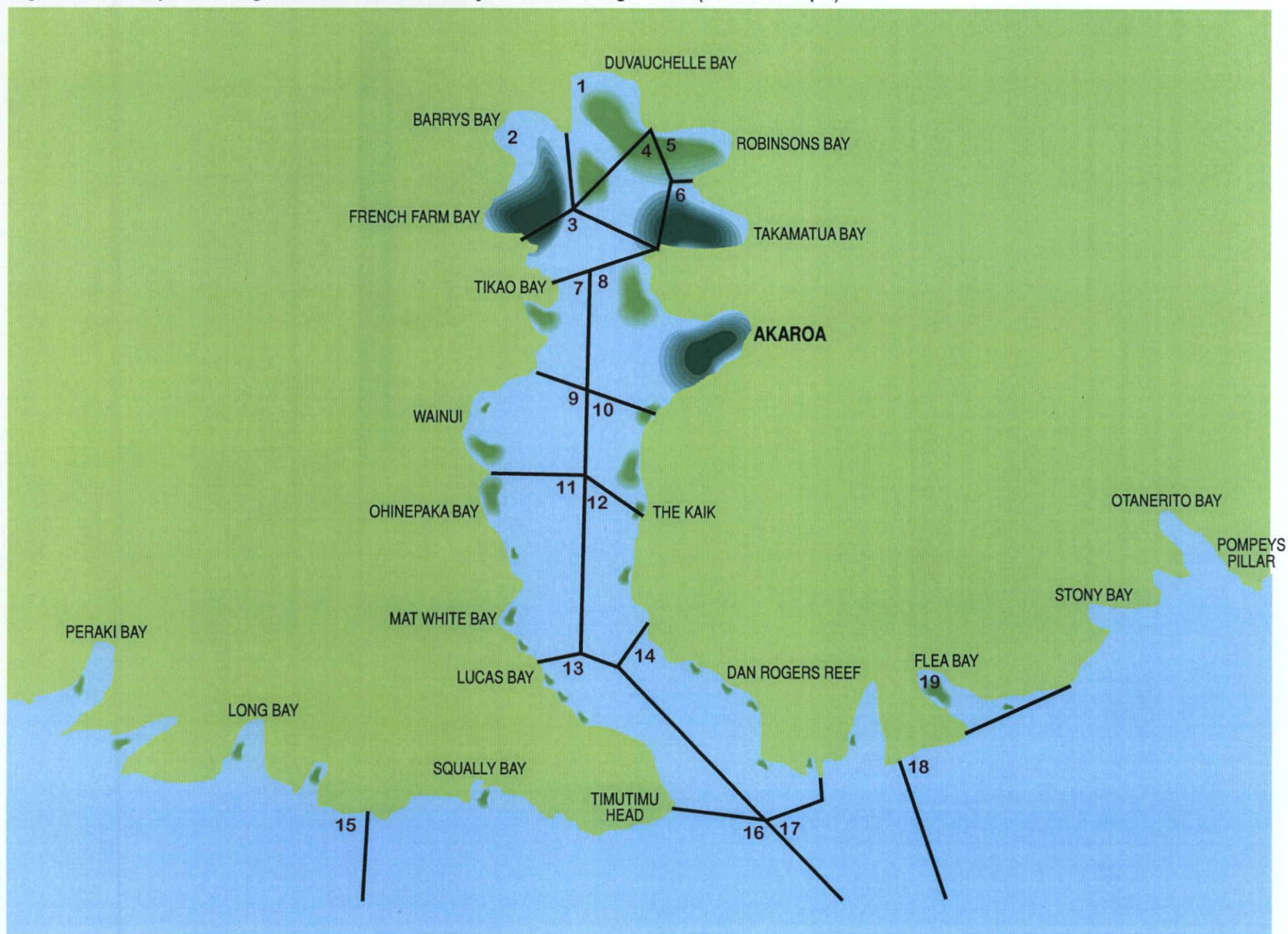


Figure 14 - Map showing location and intensity of "rod/line fishing from the shore" effort (n = 18 trips)

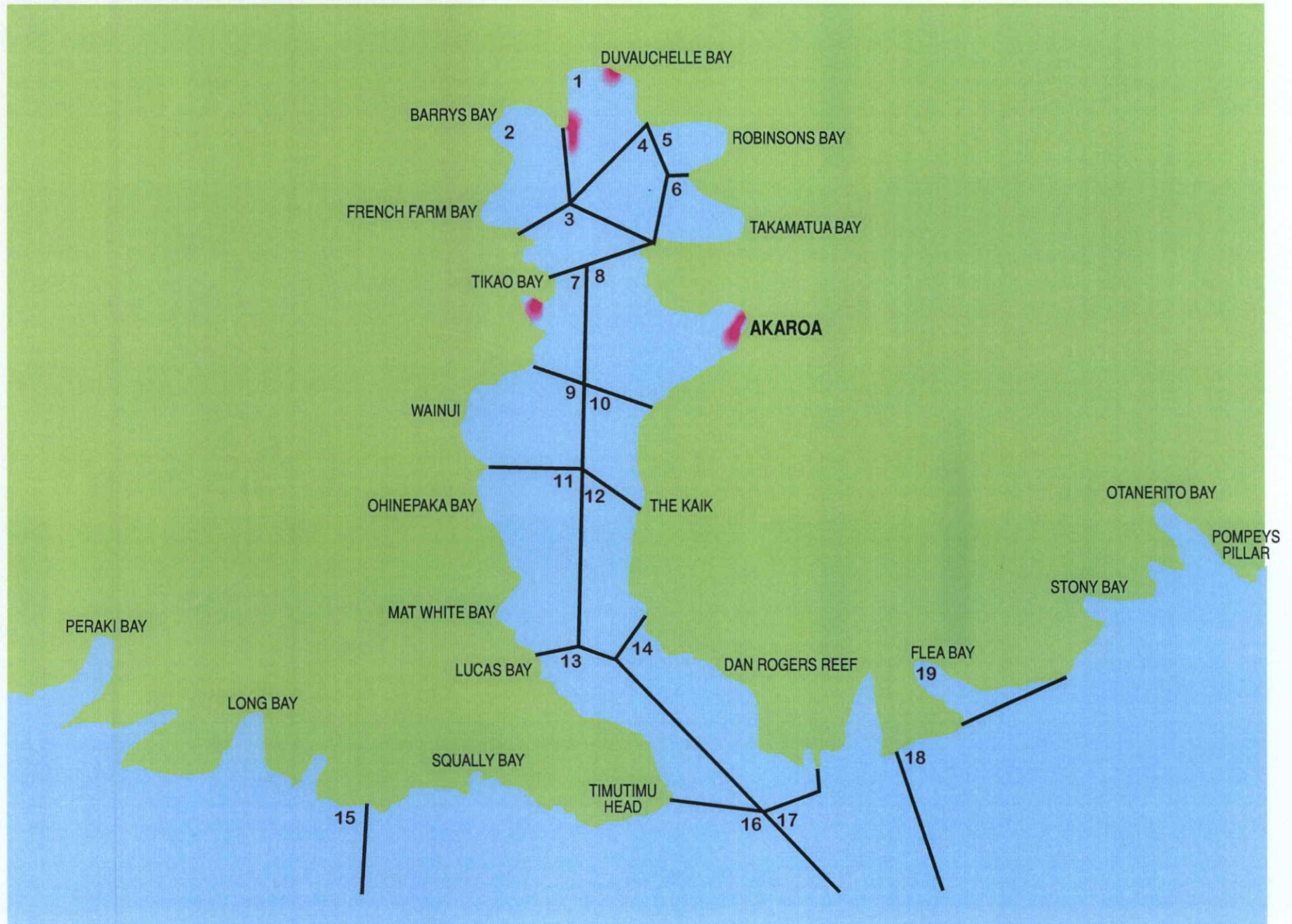


Figure 15 - Map showing location and intensity of shellfish gathering effort (n = 33 trips)

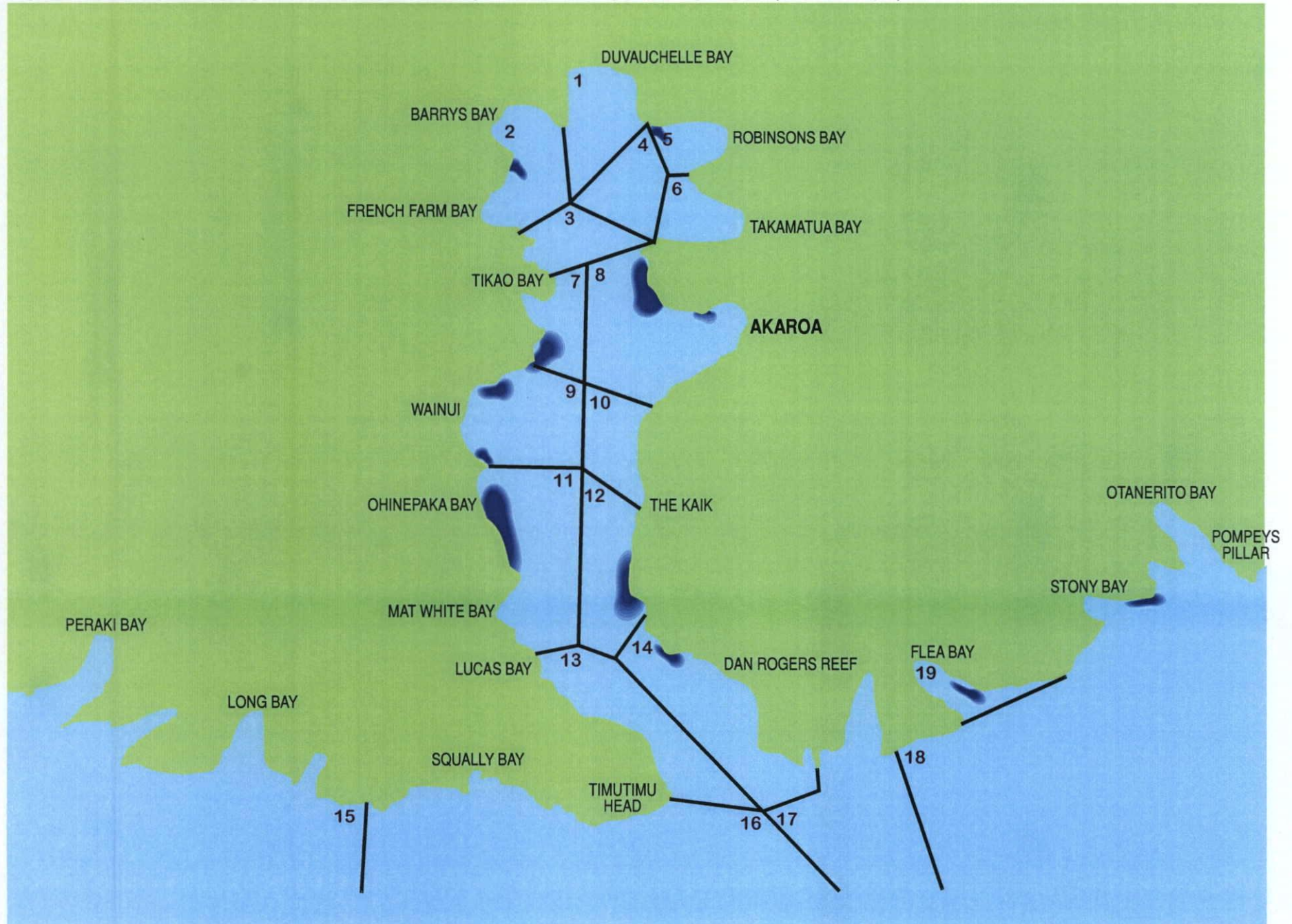
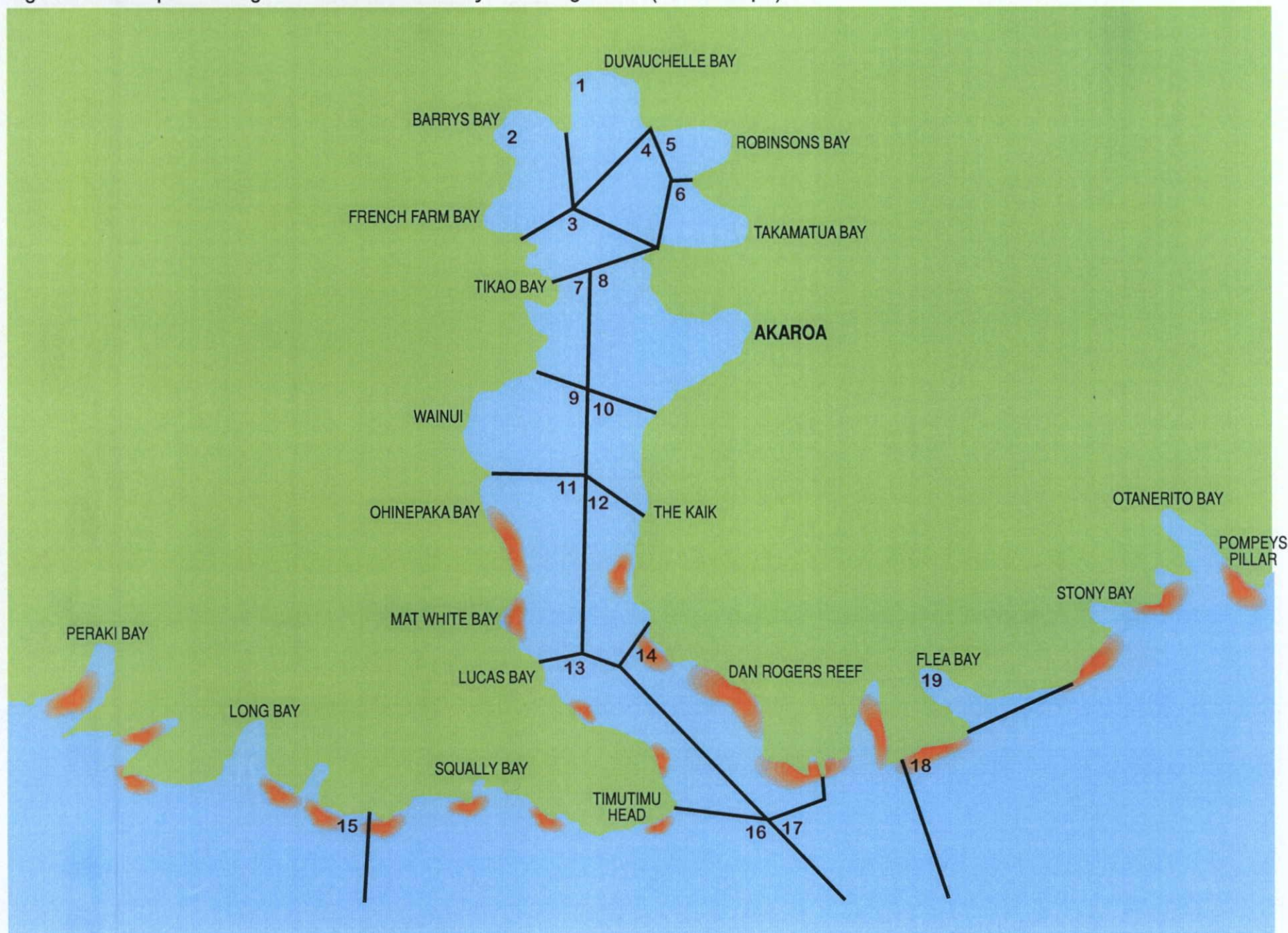


Figure 16 - Map showing location and intensity of diving effort (n = 99 trips)



8.6 Per cent use of methods by zone

The percentages of trips using each fishing method made in each zone are shown in figures 17 to 22 that follow.

Figure 17 - Distribution of trips using rod/handline from a private boat (n = 817 trips)

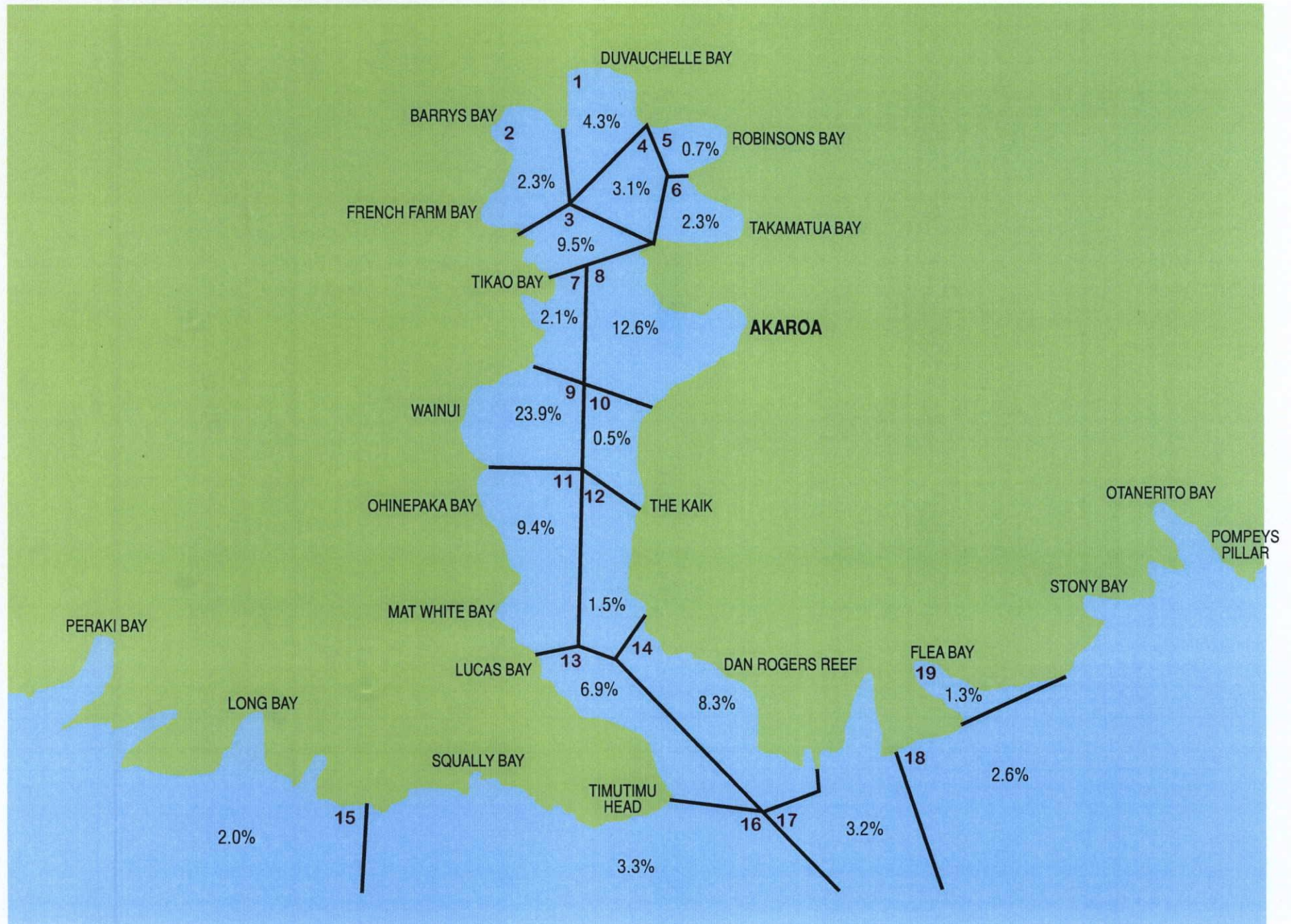


Figure 18 - Distribution of trips using set nets (n = 657 trips)

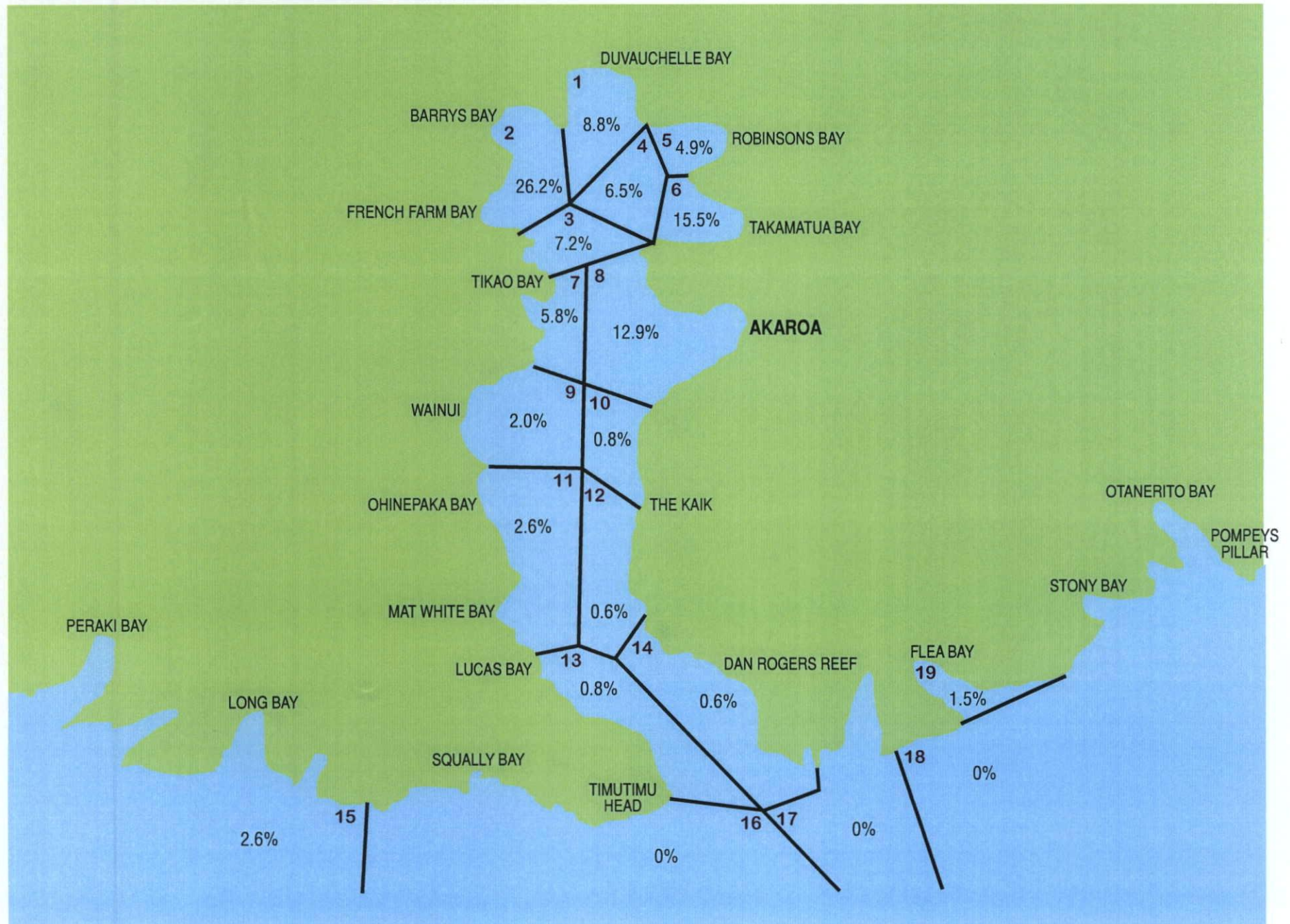


Figure 19 - Distribution of trips using rod/handline/longline from a charter boat (n = 91 trips)

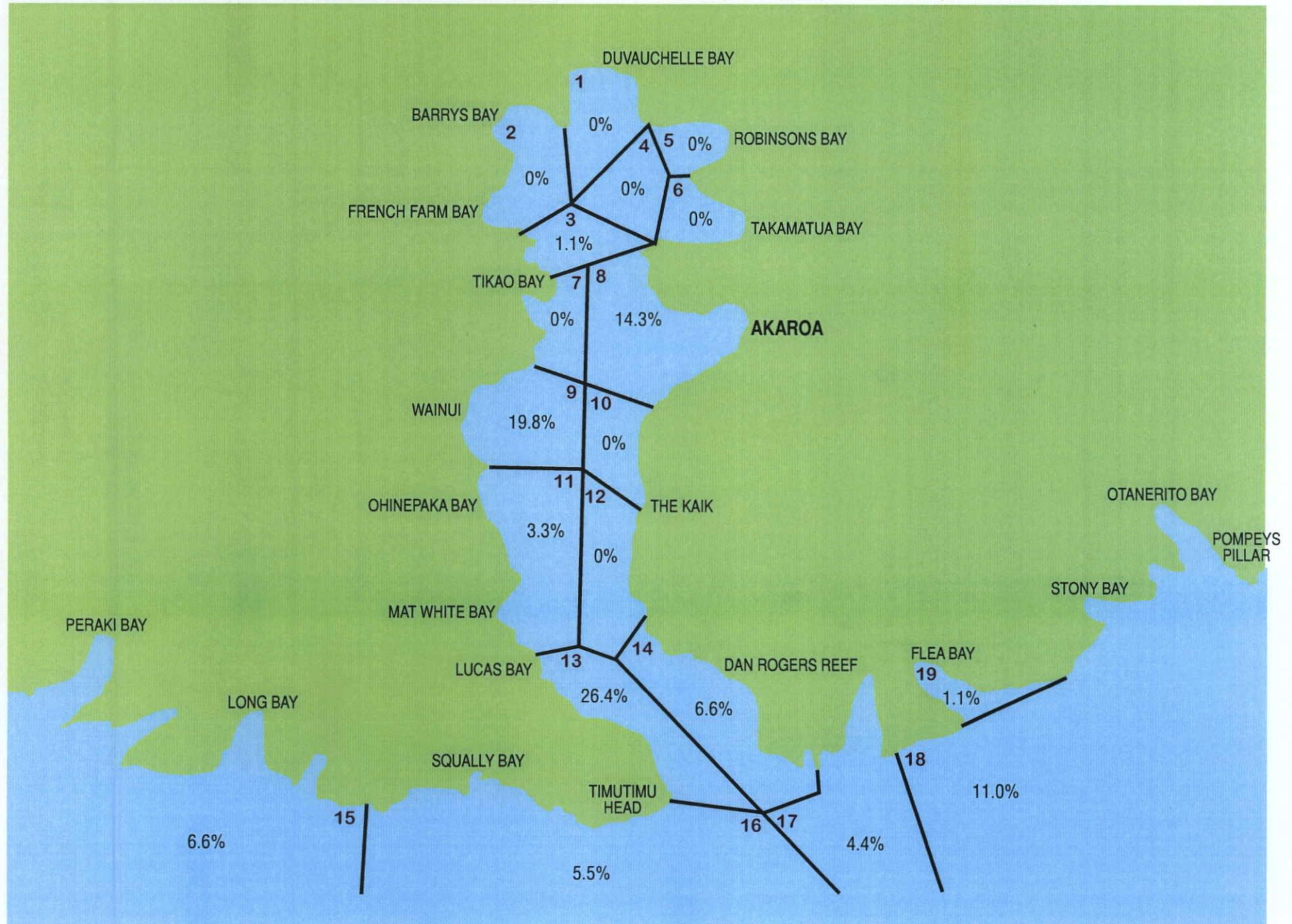


Figure 20 - Distribution of trips diving from a private boat (n = 88 trips)

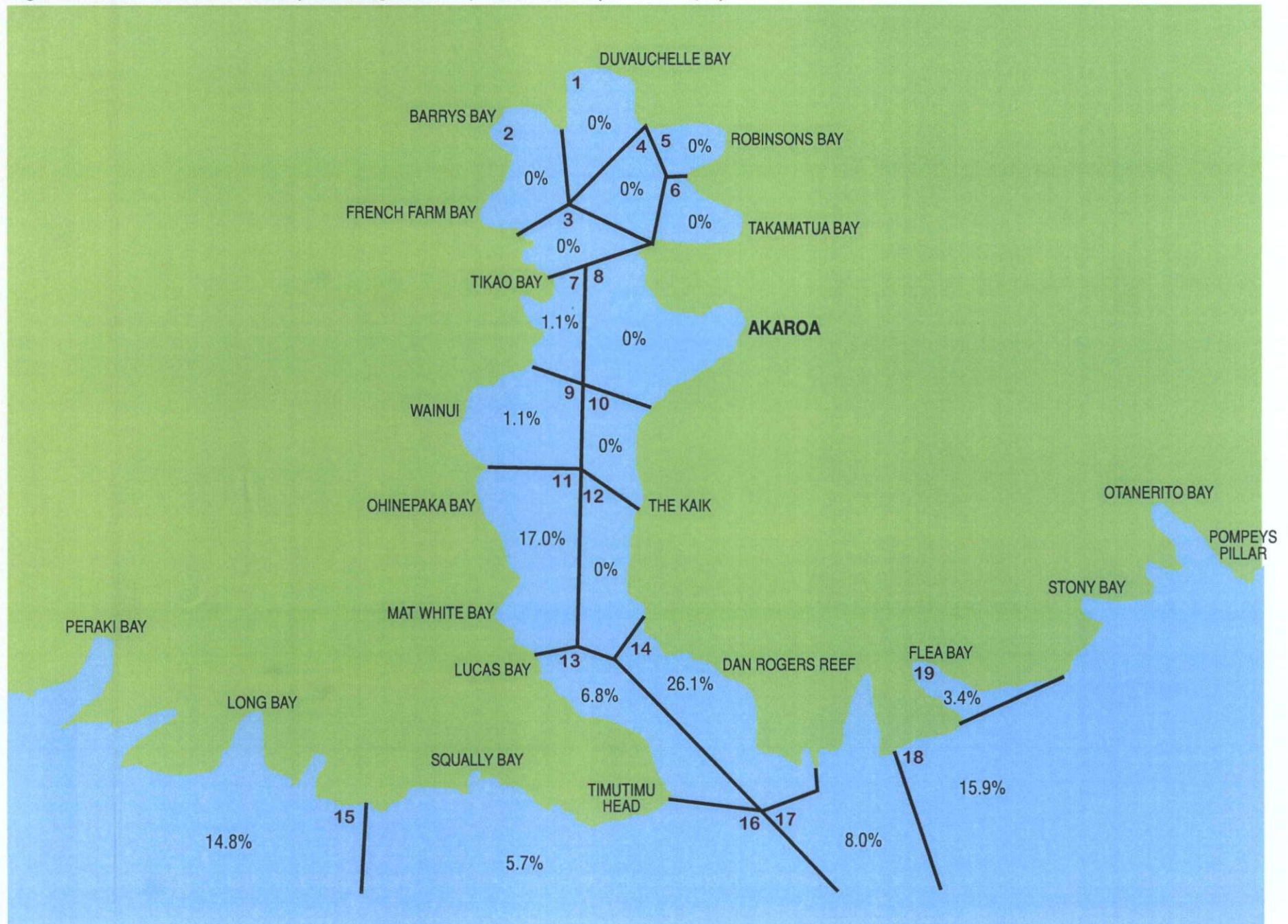


Figure 21 - Distribution of handgathering trips (n = 33 trips)

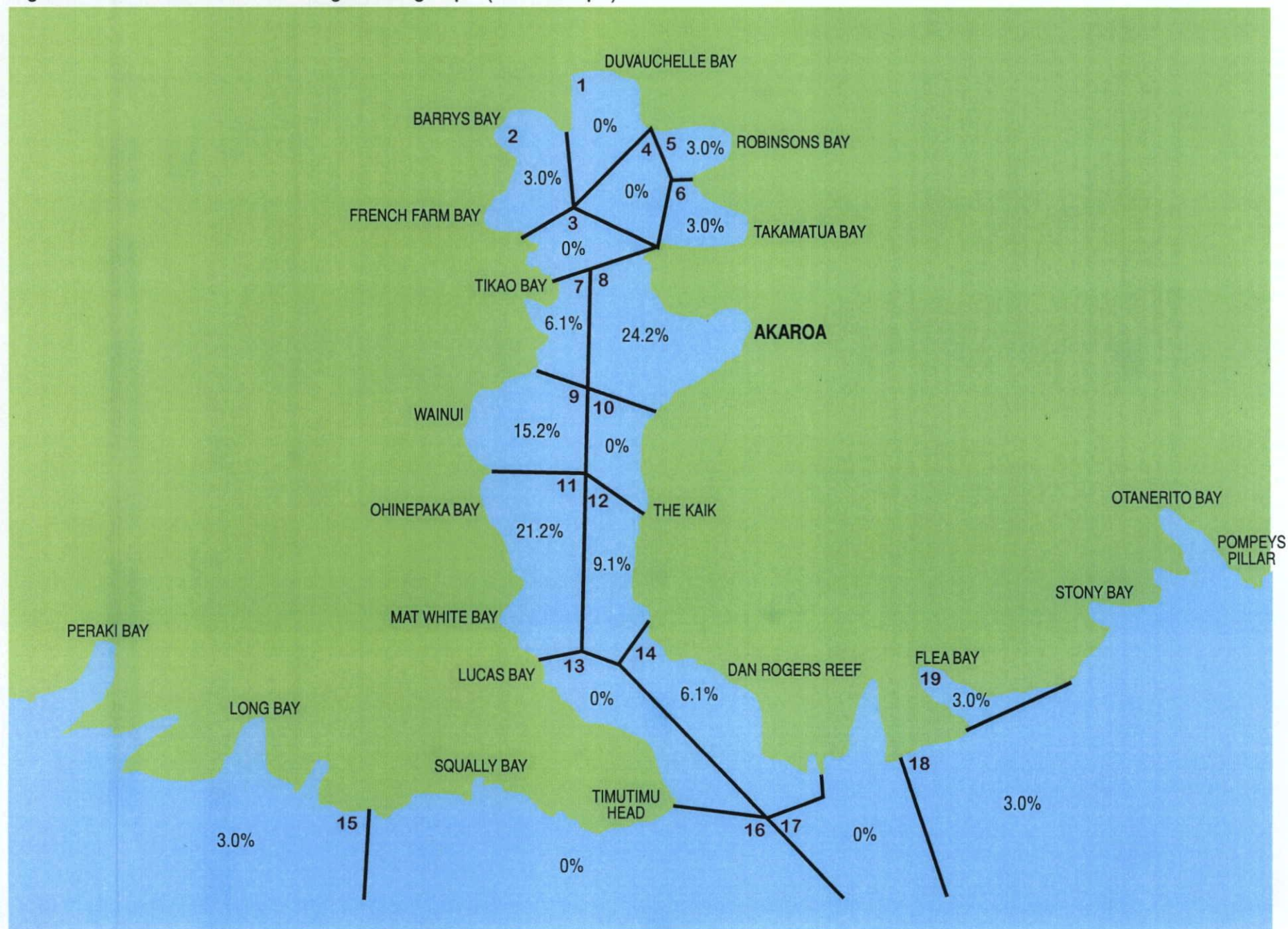
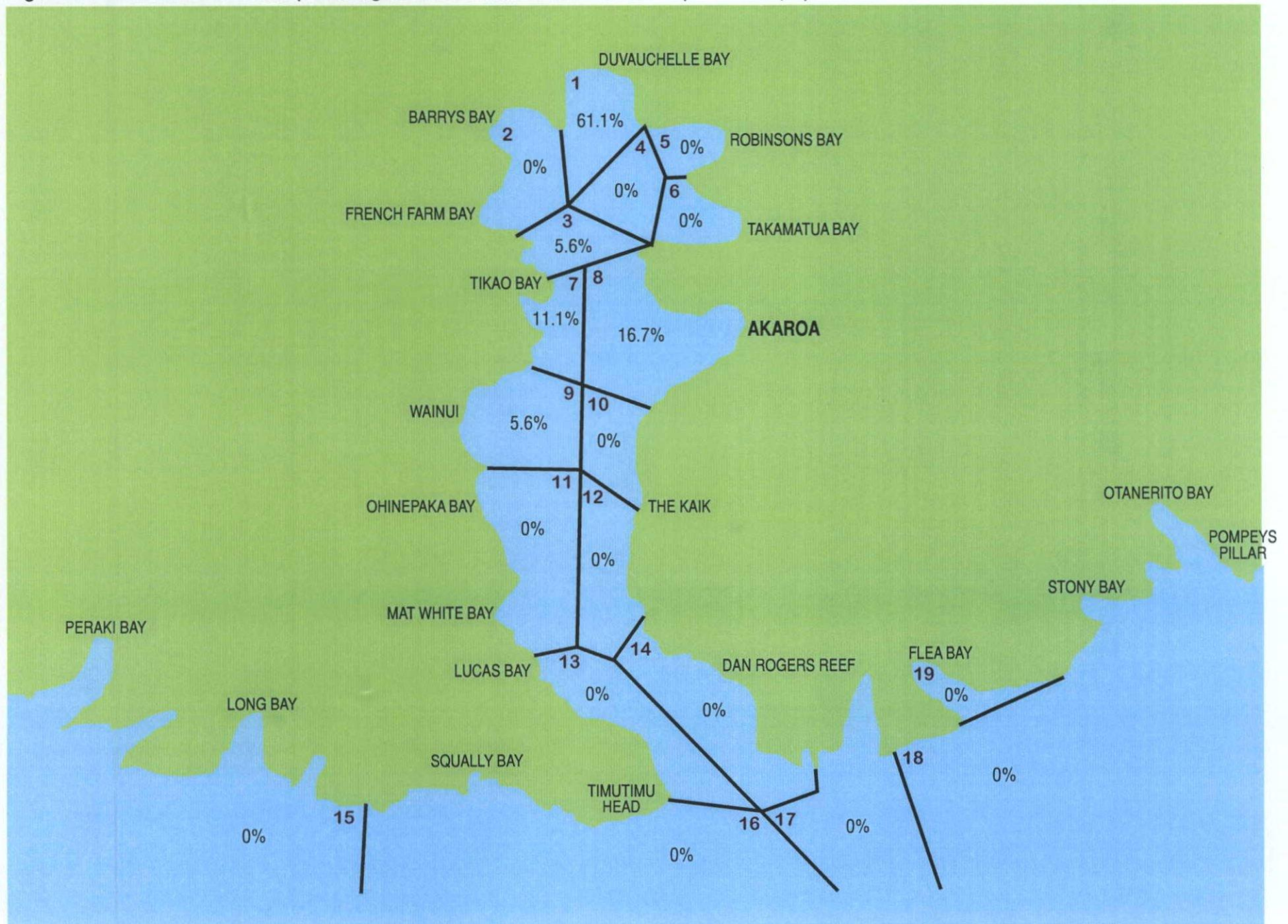


Figure 22 - Distribution of trips using rod/handline from the shore (n = 18 trips)



8.7 Catch per unit effort

Table 12: Key species; Catch per unit effort*

	Number of trips targeting the species	Total number hours spent targeting the species	Total number of the species caught when being targeted	Number of each species caught per hour when being targeted
Red Cod	777	1778	3110	1.75
Blue Cod	281	559	502	0.90
Flatfish	538	6801	4365	0.64
Trumpeter	63	134	68	0.51
Greenbone	62	171	237	1.39
Blue Moki	83	225	261	1.16
Rock Lobster	63	114	230	2.01

*This table has been limited to those species targeted by more than 50 trips.

9. CONCLUSIONS

1. The main target species are . . .
 1. Red Cod (44.6% of all trips)
 2. Flatfish (30.9% of all trips)
 3. Blue Cod (16.1% of all trips)
 4. Blue Moki (4.8% of all trips)

2. The main species caught are . . .
 1. Flatfish (4384 fish)
 2. Red Cod (4374 fish)
 3. Blue Cod (537 fish)
 4. Mullet (503 fish)
 5. Jock Stewart (382 fish)
 6. Blue Moki (290 fish)
 7. Greenbone (276 fish)
 8. Paua (254 fish)

3. The main fishing methods used are . . .
 1. Rod/handline from a private boat (46.9% of all trips)
 2. Set netting (37.7% of all trips)
 3. Rod/handline/longline fishing from a charter boat (5.2% of all trips)
 4. Diving from a private boat (5.1% of all trips)
4. The areas with the highest level of fishing effort are . . .
 1. Wainui (13.6% of all trips)
 2. Akaroa village (12.3% of all trips)
 3. Barrys Bay (11.2% of all trips)
 4. French Farm Bay to Tikao Bay (7.4% of all trips)
 5. Ohinepaka Bay to Mat White Bay (6.9% of all trips)
5. The areas with the highest level of "rod/handline fishing from a private boat" effort are . . .
 1. Wainui (23.9% of trips)
 2. Akaroa village (12.6% of trips)
 3. French Farm Bay to Tikao Bay (9.5% of trips)
 4. Ohinepaka Bay to Mat White Bay (9.4% of trips)
 5. Dan Rogers Reef (8.3% of trips)
6. The areas with the highest level of set netting effort are . . .
 1. Barrys Bay to French Farm Bay (26.2% of all trips)
 2. Takamatua Bay (15.5% of trips)
 3. Akaroa village (12.9% of trips)
 4. Duvauchelle Bay (8.8% of trips)

7. The CPUEs of the key target species are . . .

1. Red Cod - 1.75 fish per hour
2. Blue Cod - 0.90 fish per hour
3. Flatfish - 0.64 fish per hour
4. Trumpeter - 0.51 fish per hour
5. Greenbone - 1.39 fish per hour
6. Blue Moki - 1.16 fish per hour
7. Rock Lobster - 2.01 fish per hour

10. PUBLICATIONS

None so far.

11. DATA STORAGE

Data is held by both the Ministry of Fisheries and NIWA.

12. APPENDIX

12.1 Interviewers' script(s)

12.2 Questionnaire and show cards used when interviewing fishers

12.3 Covering letter included with the diary given to fishers

12.4 Pages from the diary given to fishers

12.1 Interviewers' script(s)

To be eligible for the survey the person must be

- 15 years or older
- intend fishing, diving or gathering seafood from in or around Akaroa Harbour in the coming 12 months

Script when interviewing someone who is or has obviously been fishing.

"Hello, my name is I am conducting a survey on recreational fishing in Akaroa Harbour for the Ministry of Fisheries - have you been interviewed about this before?"

IF YES: "That's great, thanks."

IF NO: "Would you have a couple of minutes to answer a few simple questions?"

IF IT IS A GROUP: "If it's OK I'd like to interview everyone in the group (who is 15 and over)."

Script when interviewing people in their home, motel, camping ground, batch etc.

Hello, my name is I am conducting a survey on recreational fishing in Akaroa Harbour for the Ministry of Fisheries - is there anyone in this household/batch etc. who is likely to go fishing, diving or gathering seafood in or around Akaroa Harbour in the coming 12 months?"

IF NO: "Thanks very much." [End interview]

IF YES: "Is that person or persons available?" [Reintroduce yourself.] "Would you have a couple of minutes to answer a few simple questions?"

12.2 Questionnaire and show cards used when interviewing fishers

MINISTRY OF FISHERIES

AKAROA HARBOUR RECREATIONAL FISHING SURVEY

1. In the last 12 months, how many times did you personally go saltwater fishing, diving or shellfish gathering in or around Akaroa Harbour?

Never [] 1-5 times [] 6-15 times [] 16-30 times [] 31 or more times [] Don't know []

2. When you go fishing, diving or shellfish gathering around Akaroa Harbour, how many people do you usually go with?

No one else [] 1 [] 2 [] 3 [] 4 [] 5 [] 6 or more [] it varies [] Don't know []

3. In the last 12 months which of the following (show card) fishing methods have you used in and around Akaroa Harbour?

- a) Rod or handline fishing from a privately owned boat (includes bait, jigs, poppers, trolling etc) []
- b) Rod, handline or longline fishing from a charter boat []
- c) Longline fishing from a privately owned boat []
- d) Shore fishing with a rod or handline []
- e) Shore fishing with a longline (e.g. kon-tiki or kite) []
- f) Diving from a privately owned boat []
- g) Diving from a charter boat []
- h) Diving from the shore []
- i) Dredging []
- j) Set netting/gill netting []
- k) Drag netting/beach seining []
- l) Hand gathering []
- m) Potting []
- n) Spearing (for flounder or other flatfish) []

4. Record sex: a) Male [] b) Female []

5. Which of the following age groups are you in (show card)?

- | | |
|--------------------------|--------------------------|
| a) 14 years or under [] | e) 41-50 years [] |
| b) 15-20 years [] | f) 51-60 years [] |
| c) 21-30 years [] | g) 61 years or older [] |
| d) 31-40 years [] | |

6. Which of the following ethnic groups do you belong to (show card)?

- | | |
|---------------------------|-----------------------|
| a) European or Pakeha [] | c) Pacific groups [] |
| b) NZ Maori [] | d) Other [] |

The Ministry of Fisheries is carrying out a year-long study on saltwater recreational fishing in and around Akaroa Harbour. We need people to keep a diary recording when and where they went fishing and what they caught. This information is vital if the Ministry is to improve the management of the Akaroa fishery. Would you be prepared to keep one of these fishing diaries? You fill it in each time you go fishing. It doesn't matter to us whether you go out once or 100 times, or whether you catch nothing or 100 fish. We just want you to keep an accurate record so we can calculate statistics.

a) Yes [1

b) No []

IF YES:

Name: _____
(First name) (Surname)

Address: _____
(Number) (Street)

(Suburb) _____ (City) _____

(Postcode if known)

Phone No. (0) _____

RECORD DIARY NUMBER

GO OVER THE MECHANICS OF FILLING IN THE DIARY

Thank you very much for helping with our research. We really appreciate it. If you have any questions about the study, the person to contact is John Bell working for the Ministry in Dunedin. Would you like his phone number? (03) 479 8165

- a) Rod or handline fishing from a privately owned boat (includes bait, jigs, poppers, trolling etc.)
- b) Rod, handline or longline fishing from a charter boat
- c) Longline fishing from a privately owned boat
- d) Shore fishing with a rod or handline
- e) Shore fishing with a longline (e.g. kon-tiki or kite)
- f) Diving from a privately owned boat
- g) Diving from a charter boat
- h) Diving from the shore
- i) Dredging
- j) Set netting/gill netting
- k) Drag netting/beach seining
- l) Hand gathering
- m) Potting
- n) Spearing (for flounder or other flatfish)

a) 14 years or under

b) 15-20 years

c) 21-30 years

d) 31-40 years

e) 41-50 years

f) 51-60 years

g) 61 years or older

a) European or Pakeha

b) NZ Maori

c) Pacific groups

d) Other



1st Floor, 45 Filleul Street,
Private Bag 1926, Dunedin, New Zealand.
Phone (03) 474-0333, Fax (03) 474-6275.

MINISTRY OF FISHERIES

Te Tautiaki i nga tini a Tangaroa

Dear Fisher

Thank you for agreeing to take part in this important study on recreational fishing in and around Akaroa Harbour. This area is an extremely important recreational fishery, and your trip records along with those from around 750 other recreational fishers will provide the Ministry with the essential information it needs in order to manage the fishery for your long-term benefit.

Please begin keeping the diary immediately, and remember to fill in the results for every fishing, diving or gathering trip you make in and around Akaroa Harbour, between now and March 1988. Please record every trip you make even if you catch nothing.

Every 3 months we will send you a newsletter or phone to remind you to send in your trip records in the reply-paid envelopes supplied. Every person who returns their trip records or advises us that they didn't go fishing (by sending in a trip record with "didn't fish" written across it) will go into a draw to win fishing equipment from Kilwell Sports.

If you have any questions or would like another diary please either phone me on (03) 479 8165 during business hours or (03) 464 0994 after hours, or send me a note in one of the reply-paid envelopes.

Thank you once again for agreeing to take part.

Good Fishing

John Bell
Survey Coordinator



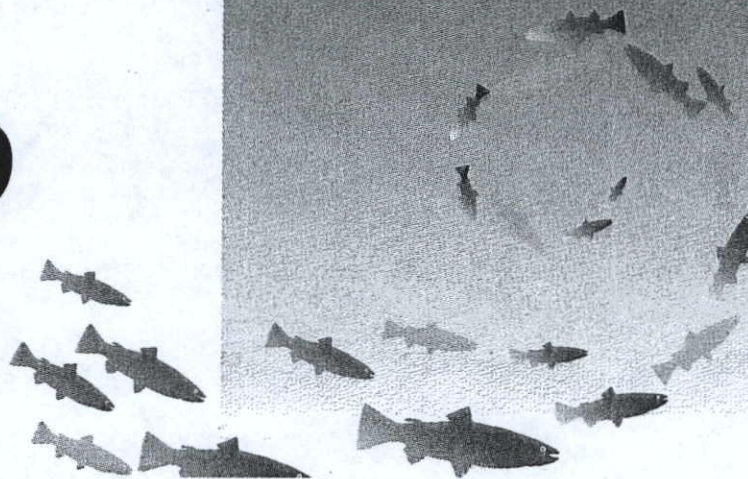
Akaroa Harbour
Marine
Recreational
Fishing
Survey

Fishing Trip

Personal
Diary



MINISTRY OF FISHERIES
Te Tautiaki i nga tini a Tangaroa



Thank you for participating in this important study on recreational fishing in and around Akaroa Harbour. The records of your fishing trips along with those of about 700 other diarists will provide the Ministry of Fisheries with vital information on catch rates and the level of fishing activity. This information will allow the Ministry to improve the management of this extremely popular fishery.

Every 3 months we will send you a newsletter, and also, every 3 months you will go into a draw to win fishing equipment from Kilwell Sports or boating equipment from Hutchwilco

Thank you once again for taking part.

John Bell (Survey Coordinator)
Tel (03) 479 8165 (Day) or (03) 464 0994 (After Hours)
PO Box 6233, Dunedin

INSTRUCTIONS

1. Please fill in a page of the diary each and every time you go out to catch fish or gather shellfish in or around Akaroa Harbour.
2. Record YOUR individual catch and fishing effort only. DO NOT record the catch and fishing effort of anyone else.
3. Please keep this diary from the day you receive it until March 1988. Every 3 months we will write to or ring you, asking you to send in your records for that period. Simply tear out the relevant page(s) from the diary and post them back in the reply paid envelopes supplied.
4. It is very important to fill in the diary for EVERY TRIP you make, even if you catch nothing.
5. Please send in your trip record sheet every 3 months even if you didn't go fishing! (Just write "didn't fish" across the sheet). This is because it is vitally important we know what times of the year people DON'T go fishing.
6. REMEMBER, every 3-monthly return that we receive, whether it be blank (showing that you didn't go fishing during the period) or one detailing several trips, will go into a draw to win fishing equipment from Kilwell Sports or boating equipment from Hutchwilco.
7. Only record one trip on each page.
8. If you are a commercial fisher, please DO NOT include any trips where you caught fish or shellfish to sell.
9. If you have any questions about the diary or the survey please phone John Bell (03) 479 8165 during the day, or (03) 464 0994 after hours.

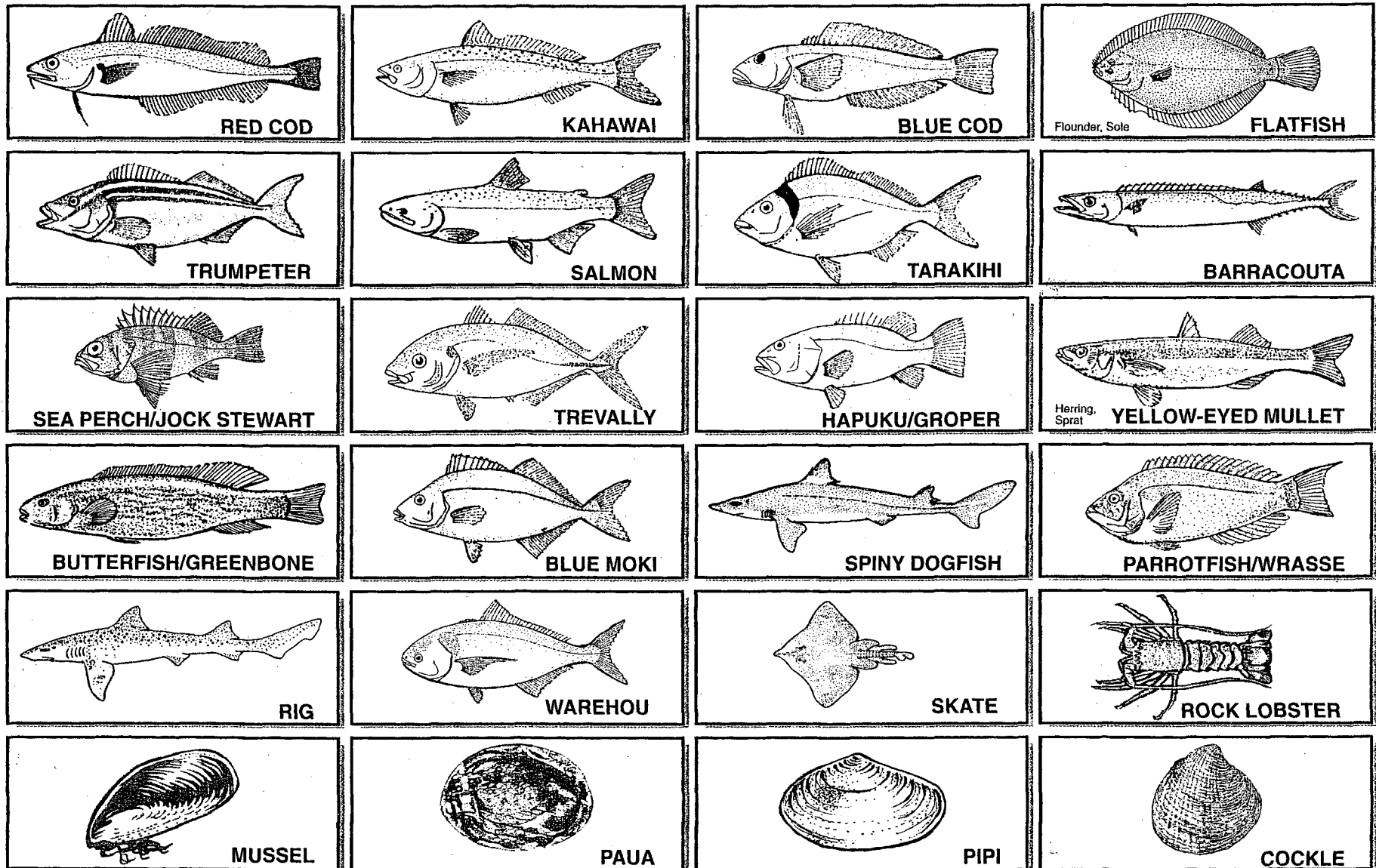
FILLING IN A TRIP RECORD

1. **Date of Trip:** Please record the day/month/year of the trip.
2. **Site Fished:** Please mark on the map the site or sites where you tried to catch a fish or shellfish during the trip.
3. **Hours spent fishing, diving, gathering etc:** Please record to the nearest half hour the time you actually spent fishing, diving or gathering etc. DO NOT count the time you spent travelling or resting. If you used a net or pot, please record the length of time the net or pot was in the water.
4. **Type of fishing method:** Please specify the fishing method you used. The options are:

1) Rod or handline fishing from a privately owned boat (includes bait, jigs, poppers, trolling etc.)	9) Dredging
2) Rod, handline or longline fishing from a charter boat	10) Set netting / gill netting
3) Longline fishing from a privately owned boat	11) Drag netting / beach seining
4) Shore fishing with a rod or handline	12) Hand gathering
5) Shore fishing with a longline (e.g. kon-tiki or kite)	13) Potting
6) Diving from a privately owned boat	14) Spearing (for flounder or other flatfish)
7) Diving from a charter boat	15) Other (please specify)
8) Diving from the shore	

If you used more than one fishing method on a trip, please treat each method as being a separate trip and fill out a trip record for each method.

5. **Species targeted:** Please specify ALL the species of fish and/or shellfish that you set out to catch. Please be as precise as you can when naming the species. For example, don't just put "cod" was it red cod or blue cod.
6. **Species caught:** Please record ALL the different species of fish and/or shellfish that you caught and killed. Include any dead fish that you discarded or used as bait. Please do not include any fish that you returned to the water alive. As with species targeted, please be as precise as you can when naming the species caught.
7. **Number of each species caught:** Please record only your own catch (including fish discarded or used as bait). However, if the catch was the result of a group effort (e.g. netting or longlining), please divide the catch evenly among the people involved, even if in reality some people received more than others, and record your share.
8. Remember to use a separate trip record page to record each trip you make. If you use more than one fishing method on a trip please treat each method as being a separate trip.
9. The examples over the page shows how the trip record should be filled in.
10. If you have any comments that you would like to make, please write these on the trip record page or on a separate sheet.



TRIP RECORD

Please use a separate trip record for each trip.

Date of Trip: 29 / 3 / 97 Hours spent fishing, diving, gathering etc: 1 hr

Site Fished: *On the map below please mark with an 'x' (as accurately as possible) the site(s) you tried to catch fish at during this trip.*

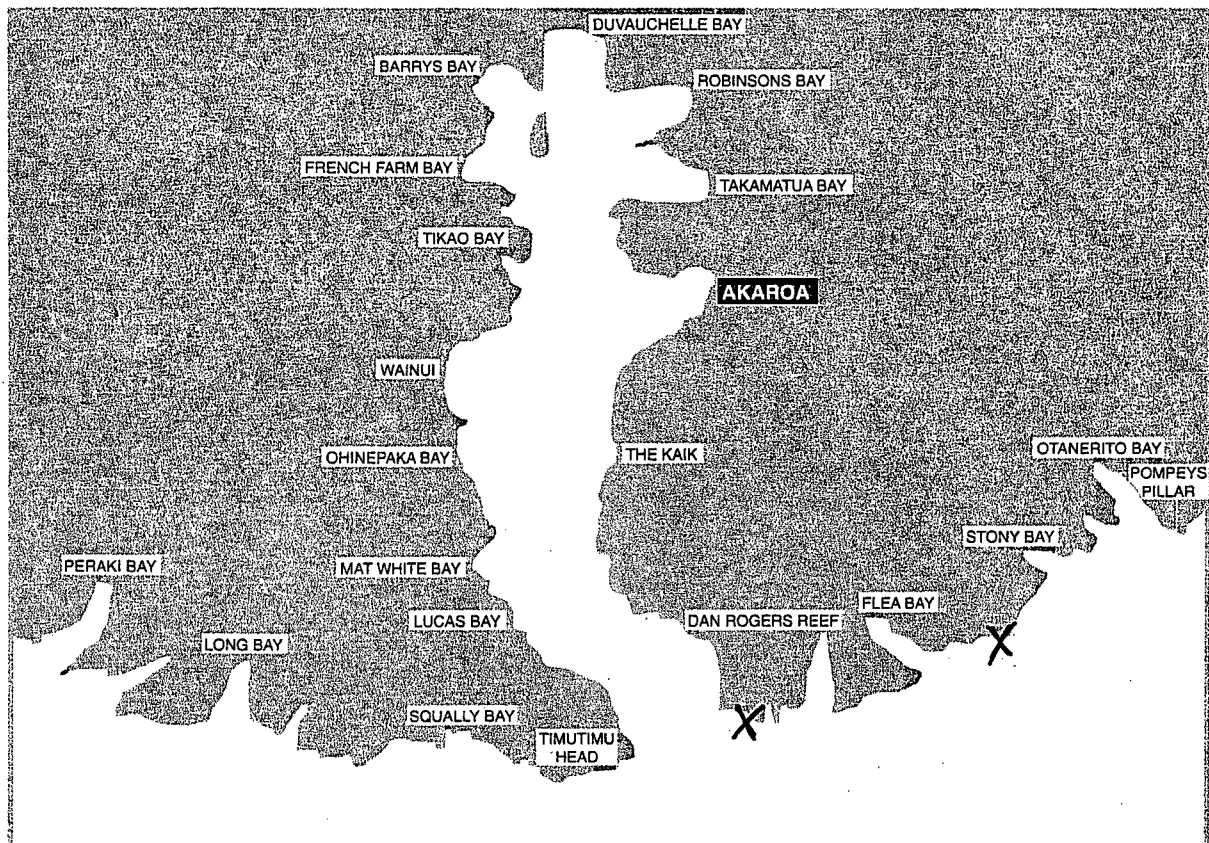
Type of fishing method: Diving from a privately owned boat

Species targeted:

Rock lobster

Species caught:

Species	No. caught and killed
<u>Rock lobster</u>	<u>2</u>



Diary Number:

TRIP RECORD

Please use a separate trip record for each trip.

Date of Trip: 26 / 10 / 97 Hours spent fishing, diving, gathering etc: 2½ hrs

Site Fished: On the map below please mark with an 'x' (as accurately as possible) the site(s) you tried to catch fish at during this trip.

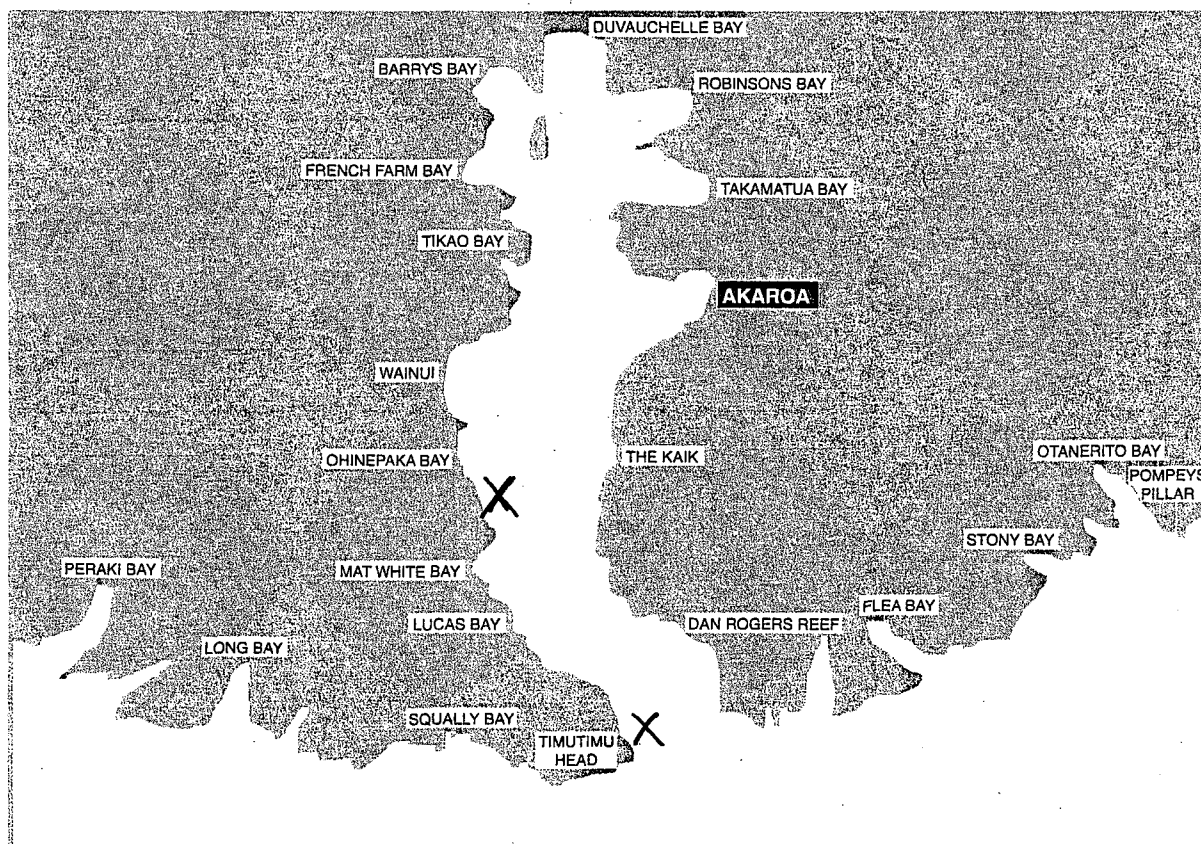
Type of fishing method: Rod fishing from a privately owned boat

Species targeted:

Blue cod

Species caught:

Species	No. caught and killed
Red cod	3
Sea perch	2



Diary Number:

(Tear Here)

TRIP RECORD

Please use a separate trip record for each trip.

Date of Trip: / / Hours spent fishing, diving, gathering etc:

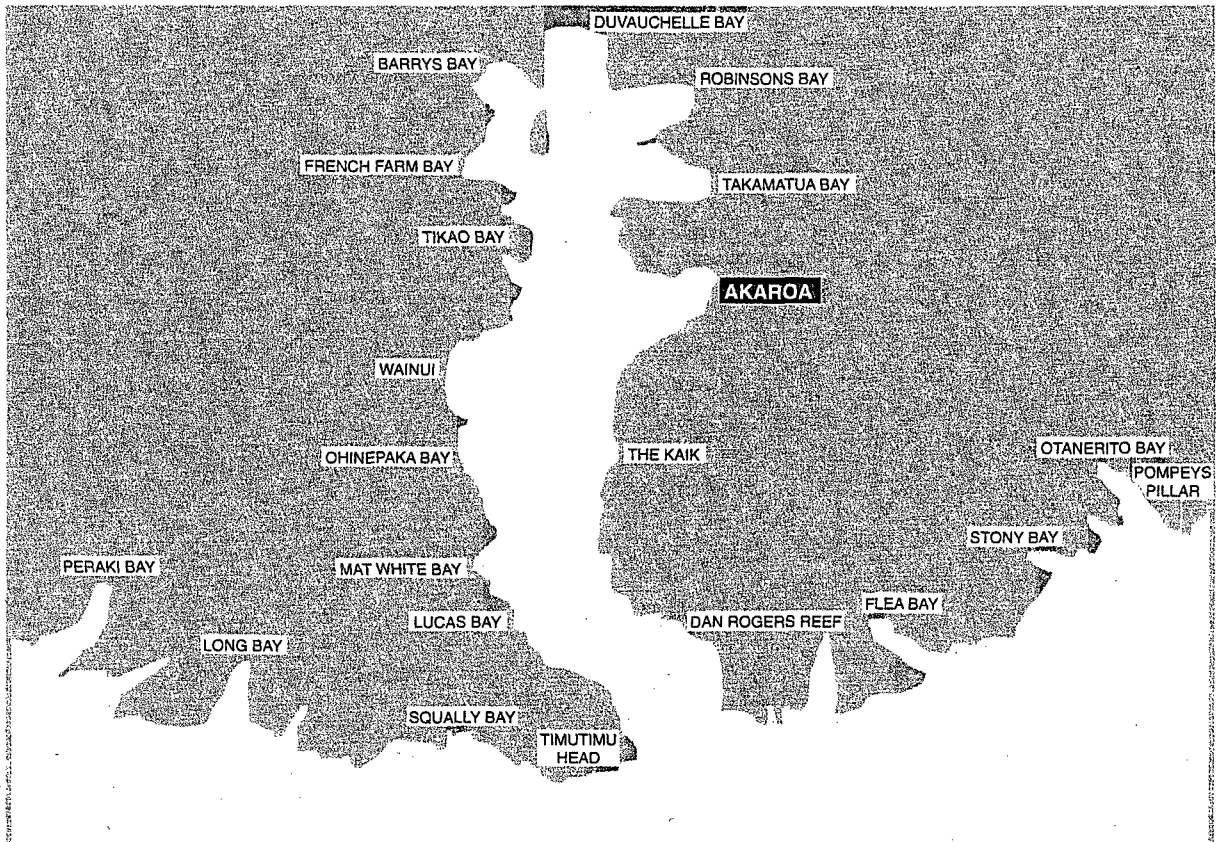
Site Fished: On the map below please mark with an 'x' (as accurately as possible) the site(s) you tried to catch fish at during this trip.

Type of fishing method:

Species targeted:

Species caught:

Species	No. caught and killed



Diarist Number: