

Fishers' ecological knowledge of sawfishes in the Sepik and Ramu rivers, northern Papua New Guinea

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Questionnaire

Name of interview site/village:

Age of interviewee:

Sex: M / F

Profession:

Questions for fishers only

How many years of fishing experience does s/he have?

If retired, in what year did s/he stop fishing?

What fishing gear(s) does s/he use? (specify the exact net type or other gear name & description):

What types of fish does s/he target with each net type?

Does s/he fish from a boat or from land?

Does s/he fish in the river, sea or both?

If s/he uses a boat, is s/he the owner of that boat?

Does the boat have a motor?

1. Do you know this animal (*show the sawfish picture*)?

2. Have you ever seen this animal (*sawfish*)?

If they do NOT know the sawfish or have never seen one, go straight to question 13.

If they DO know the sawfish and have seen AT LEAST ONE during their lifetime, continue from question number 3.

3. (a) What is the local name (here in your village/area) for this animal (*sawfish*)?

(b) What is your local language (tok ples) here?

4. Where have you seen the (*sawfish*)? (They can choose multiple answers)

At a market/alive in the water/dead at landings site/dead in a fishing net/other (give details)

5. (a) When was the last time (year) you saw the (*sawfish*)?

(b) Where did you see the (*sawfish*), the last time you saw one?

(c) The last time you saw a (*sawfish*), who caught it?

(d) What kind of fishing gear did that person use to catch the (*sawfish*)?

(e) The last time you saw a (*sawfish*), how long was it?

6. (a) How many times have you seen a (*sawfish*) during your lifetime?
Never/once/2 times/3-5/5-10/10-20/more than 20 I don't know
- (b) How many times have you caught a (*sawfish*) during your lifetime?
Never/once/2 times/3-5/5-10/10-20/more than 20/I don't know
- (c) (*If s/he has caught one or more sawfish himself or herself*) Where did you catch the (*sawfish*), and when?
7. (*If s/he has seen the sawfish more than 3 times*) – Is the (*sawfish*) is always caught during a specific season or month of the year?
8. (*If s/he has seen the sawfish more than 3 times*) – What kind of environments have you seen (*sawfish*)?
River/open ocean/close to the coast/mangrove/river mouth/sandy bottom/rocky bottom muddy bottom/other – give details
9. (*If s/he has seen the sawfish more than 3 times*) – Have you noticed a change (increase/decrease/no change) in the number of (*sawfish*) in the area where you fish, over your lifetime?
10. (*If they stated that there has been an increase or decrease*) – What do you think is the reason for this change in the number of (*sawfish*)?
11. Have you noticed a change in the numbers of other kinds of fish/animals too? If yes, what kinds of animals?
12. What are (or were) (*sawfish*) used for? eat/sell meat sell fins/sell other (specify)/other use
- What were the sale prices (meat, fins and/or rostrum), the last time that you (or someone you know) sold a (*sawfish*)? (State price, where it was sold and in which year)
13. How many adults (age 18+) and how many children (age 0-17) live with you, in your house?
14. How many other people in your house work (have a job)?
15. Do you have electricity in your house?
16. Were you born here (in this region)?
17. How many years of school education did you complete?

Table S1. Names for sawfish in East Sepik Province, in local languages. SR: Sepik River; RR: Ramu River; KR: Keram River

Tok ples (language)	Region/ villages	Name for sawfish
Kaia	Kopar (SR)	<i>Uruman; kangonase</i> ¹
Kanda	Angoram (SR) Sumundo (KR)	<i>Simalung/ simarun</i>
Iatmul/ Iapmai	Tambanum, Timbunke (SR)	<i>Shigat/ shikat/ sigat</i>
Andano	Chambri Lake (SR)	<i>Simie/ shimihe</i>
Kakra	Kandok (SR)	<i>Warame/ waramah</i>
Momkor	Mangarong (RR)	<i>Rata</i>
Apma	Kambot (KR)	<i>Simalung</i> ² ; <i>mhan</i>
Ongoinde/ Murik	Murik Lakes (coast)	<i>Woreman/ waruman</i>

¹*Kangonase* may refer to all sharks

²Some interviewees said that *simalung* referred to a shark ‘with no saw’, which may be a guitarfish

Table S2. Rostra from the narrow sawfish *Anoxypristis cuspidata* and the largetooth sawfish *Pristis pristis*, documented during the study. SRL: standard rostrum length; SRW: standard rostrum width (following Whitty et al. 2014)

Rostrum ID	PNG-06	PNG-07	PNG-08	PNG-09	PNG-10	PNG-11	PNG-12
Species	<i>P. pristis</i>	<i>P. pristis</i>	<i>P. pristis</i>	<i>A. cuspidata</i>	<i>P. pristis</i>	<i>P. pristis</i>	<i>P. pristis</i>
Source	Fisher, Kopar	Fisher, Kopar	Fisher, Kopar	Fisher, Kopar	Fisher, Kopar	Fisher, Marienberg	Fisher, Marienberg
SRL (cm)	94.4	93.8	c. 71	34.0	57.4	107.5	c. 19
SRW (cm)	22.3	20.6	15.0	4.3	13.8	24.6	-
Tooth count left/right	19/19	19/18	23/23	22/23	18/16	19/19	-
Capture location	Sepik River	Sepik River	Sepik River	unknown	Mouth of Sepik River	Beyond mouth of Sepik River in salt water	Sepik River, close to Marienberg
Capture date	2016	unknown	unknown	unknown	14 April 2017	c. 2010	May/June 2016
Notes			In bad condition; precise measurements not possible				Damaged rostrum