

Skipper Science Fish Stomach Content Imaging Protocol

Updated: Oct. 17th 2022

Start here

Log into ISN Skipper Science app, and click "+ New Observations"

In a sampling session use the arrows or the menu bar to navigate to the following pages in the app and fill them out:

- GPS Location
- General Information
- Observation Details
- Images
- Database Actions (Save)

Select a fish to sample: this should be fairly random process – you decide how to implement it (grab every 10th fish, reach into a bin and grab one, etc). Track the number of empty stomachs between stomachs with prey and record the number discarded in the Comments box in the "General Information" page of the app.

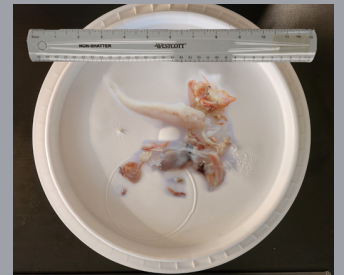
When you find a stomach with contents record the relevant information on the Observation Details page of the app.

- Species/Object = Fish & Wildlife > Fish > Sablefish
- Presence/Absence = present
- ID Confidence = Sure
- Sex = Male or Female
- Age Class = Adult (or another category if relevant)
- Exact Count = 1

Measure the fork length of the fish to be sampled and its location if possible and record in the Comments box on the Observation Details page of the app.



Remove the stomach cutting as close to the gill arches as possible and between the stomach and intestine. Cut open the stomach and place the contents on the bucket lid for imaging, use the underside of lid. If there is obvious bait in the stomach, remove it. Then place the ruler above the contents on the bucket and snap a picture using the "Add picture button" in the Images page of the app



IMPORTANT – When you are finished recording the information for a sample be sure to hit the **blue Save button** on the Database Actions page of the app to save your observation.

After you save the observation, it should be listed on the Landing Page of the SS app. The observation will be saved on your mobile device until you have a signal or wifi and upload it to the Skipper Science database.

See the back/next page for examples photos.

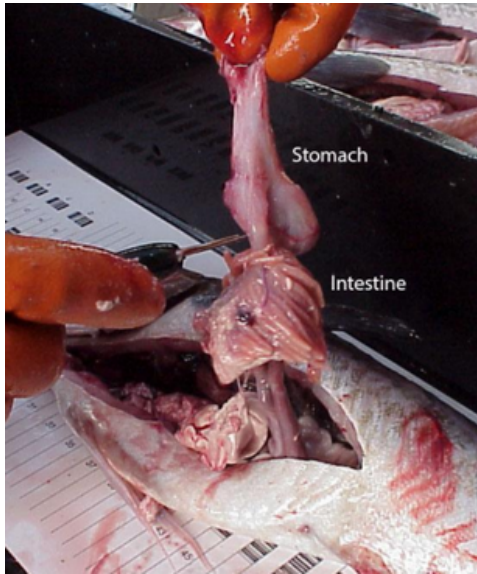
Need help? Call Hannah-Marie Garcia at (843)991-9427
Or email info@skipperscience.org

 **INDIGENOUS**
SENTINELS NETWORK

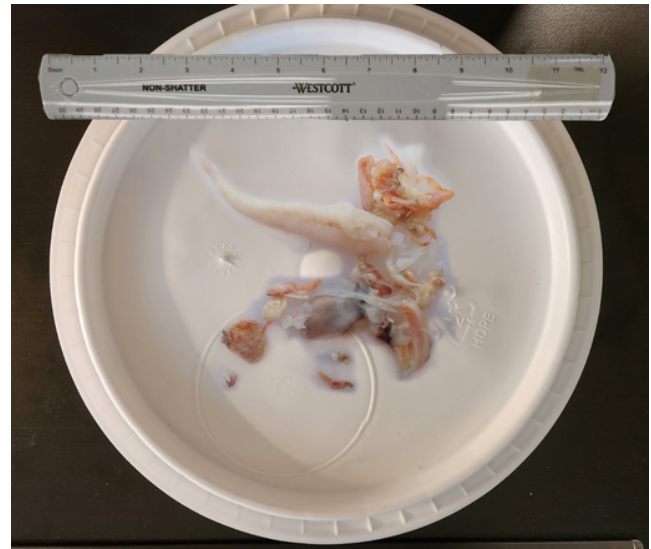


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Example of how to remove stomach:



Example of how to take a picture of the stomach contents on bbucket lid backing with ruler for scale:



12:37

ISN Skipper Science

GPS Location

Please enter your GPS location

☐ Don't use internal GPS receiver

☒ Use internal GPS receiver (GPS must be enabled)

Get GPS data

Latitude

61.17752426643599

Longitude

-149.88965239331333

Altitude (m)

49.644012451171875

ISN Skipper Science

General Information

Start Date

Oct 17, 2022 at 4:21 PM

End Date

Comments

7 empty stomachs discarded

ISN Skipper Science

Environmental Conditions

Weather Method

On-Site Estimate

Weather Condition

☐ clear

☒ drizzle

☐ fog/mist

☐ glare

☐ hail

☐ heat wave on water

☐ high overcast

☐ lightning

☐ low clouds

☐ no observation

☒ overcast

ISN Skipper Science

Environmental Conditions

Wind Speed

8-12mph

Sea State/River Level

4ft-6ft

Wind Direction

E

Tide

Mid

Air Temperature

45

F C

Water Temperature

ISN Skipper Science

Observation Details

Species/Object

Fish & Wildlife

Fish

Sablefish

Anoplopoma fimbria

Presence/Absence

present

ID Confidence

Sure

Sex

Female

ISN Skipper Science

Observation Details

Age Class

Adult

Exact Count

1

Minimum Count

Maximum Count

Count Units

Number

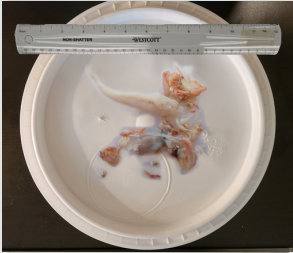
Comments

ISN Skipper Science

Images

Add picture

Select from gallery



ISN Skipper Science

Database Actions

Save

Record #1

Created: 10/17/2022, 4:21:24 PM

Type: Skipper Science Observation

Observer: Bruce Robson

Edit this form

Upload now

New Observations