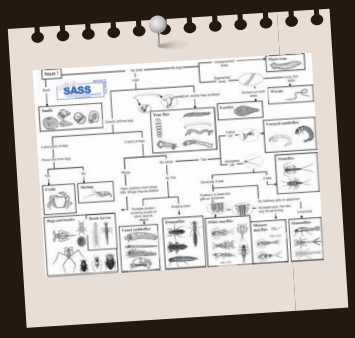
MiniSASS

For river assesment



Equipment



identification chart



bucket



gumboots



tray



Stopwatch



Petri dish



pipette



net (Small & big)



magnifying glass



Score Sheet



pen

What is MiniSASS (Mini Stream Assess-ment Scoring System)? It is an assessment method that is used to evaluate the health of a river based on the types of macroinvertebrates (animals with no internal skeletons) that are identified in the river.



01

Selecting the sampling location.

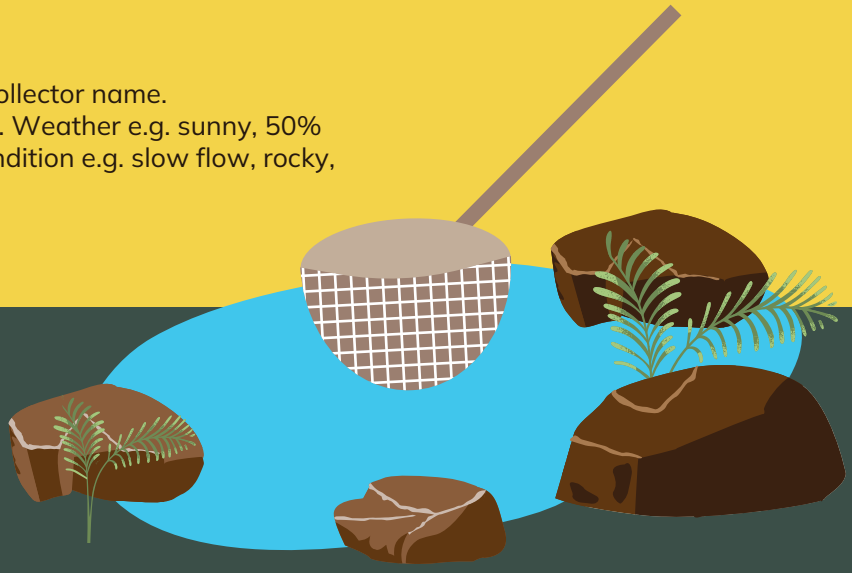
- Decide which part of the river to sample: lower/middle/upper.
- Ensure that the sample area has flowing water: ideally choose a spot that has the following habitats: gravel, sand, mud (GSM); rocks & vegetation.

Teamwork. Ensure that there are a minimum of 2 persons conducting MiniSASS.

02

Record. River name, date, time, organisation name, collector name.
Site description e.g. near farm / house, deforestation. Weather e.g. sunny, 50% cloudy.**Vegetation cover** e.g.full/50% cover. River condition e.g. slow flow, rocky, sediment,visible pollution.





03

Sampling. The intention of the MiniSASS assessment is to capture macroinvertebrates in the net by sampling: passing the net at the different habitats at the chosen part of the river.

04

Sampling Time. Pass the net at different habitats in the river for a total of 5 minutes: at each habitat, the sampler should say “start” (to trap creatures in the net) & “stop” to move to the next habitat, so that the timekeeper can start & stop the timer until the 5 minutes is reached.

Start sampling. Walk upstream sampling the different types of habitats in no particular order:

GSM. One person lightly trample in the i) gravel, ii) sand & iii) mud habitat and pass the net in the water to capture any creatures.

Rocks. Sample all size of rocks**.** Pass your boots & your hand on & under rocks on the riverbed & along the riverbank. Place the net to capture any creatures dislodged from the rocks.

Vegetation e.g. roots and plants along the river bank. Move the net in a circular motion through the vegetation to dislodge the invertebrates.

Fast flowing and pool habitat. Include these spots in your sampling if present at the sampling location.

05

Empty the sample from the net. During the 5 minutes of sampling, take time to empty your net in a bucket filled with river water. Check if there are any creatures still in the net and place them in the bucket.



06

Transfer the content. After completing the 5 minutes of sampling, use a small net to transfer the content from the bucket to the white tray filled with river water.



07

Identification of macroinvertebrates. In the tray use the MiniSASS identification chart for identification.

Record the group & number of macroinvertebrates in the sample.

Example: Sensitivity Score

A) Add the circled Sensitivity Scores = 7.
B) Number of groups identified = 2
C) A divide B = MiniSASS Score = 3.5

08

Finding the Sensitivity Score on the MiniSASS score sheet for each type of macroinvertebrate identified: Circle the type of macroinvertebrate identified: e.g. if 2 flat worms have been identified & 1 kind of snail, use the marker to circle each type & the corresponding scores: 3 for flat worms; 4 for snails.



09

Interpreting the data.

Conditions	Score
Natural	6-7
Good	5-5.9
Fair	4-4.9
Poor	3-3.9
Very Poor	<3

10

Returning the sample to the river once identification is done. Slowly pour the contents of the tray into the river.

11

Cleaning and storing the equipment. Rinse the equipment with clean water to prevent contamination and store safely.

Clean Rivers, Healthy Lives

Refer to the River Health and Safety Training Manual by Gaea Seychelles

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