

INSTRUCTIONS FOR THE SPRING INDEX PERIOD HABITAT DATA SHEET¹

Data entries for all Spring Index Period physical habitat variables are based on observations within or from the 75m site only. Use the yellow ropes for measurements.

Station Identification

Fill in your site number under "Segment ID", the name of the stream, the date, and your name(s).

Distance of Nearest Road to Site

When practical, this variable should be measured with the rope or GPS to the nearest meter. If not practical, it can be estimated to the nearest 10m.

Trash Rating

The trash rating is scored on a 0-20 scale based on criteria on the back of the form.

Riparian Vegetation

a) **Buffer Width.** Measure the riparian buffer width to the nearest meter on each side of the stream. The left and right banks of the stream are determined while facing downstream. Record the average width of the buffer. Buffer breaks should not be considered when estimating the average buffer width as buffer breaks are recorded in a different portion of the data sheet (see below). If the average buffer width is greater than or equal to 50 meters, enter 50 for the buffer width.

b) **Adjacent Land Cover.** Using the codes for adjacent land cover types on the back of the form, record the type of land cover immediately adjacent to the stream buffer. If the buffer is 50 m or more, then the same code that was recorded for the buffer should be recorded for the adjacent land cover.

c) **Riparian Vegetation.** Using the codes for vegetation types on the back of the form, record the dominant vegetation types present within the 50m buffer of the 75m reach. As many as four types can be recorded. The vegetation types are recorded in order of their dominance within the buffer, with the most dominant recorded first (in the left most box for the bank where the buffer is being recorded). Stem density and canopy density should both be taken into consideration for determining density. However, stem density should take precedence over canopy density.

Buffer Break Types

Examine both banks of the stream for the entire 75 m reach for buffer breaks. For each type of buffer break found, record its severity as M (minor) or S (severe) in the box for the appropriate bank of the stream.

¹Based on the Maryland Biological Stream Survey.

Channelization

Inspect the site for any evidence of channel straightening or dredging. If you see any evidence of channel straightening or dredging within the 75m site, measure separately the linear extent of the channelization on each bank and on the stream bottom to the nearest meter. Record the measurements in the appropriate boxes. If the site has a braided stream channel (islands in the stream), the total extent of channelization should be recorded, even if the total for either of the banks or the stream bottom is more than 75m. Since the objective of this measure is to determine the total length of stream channel that is channelized, this is acceptable.

Land Use

While at the site, conduct a survey of the surrounding area for land use types. Mark "Y" or "N" for each land use type listed to indicate whether or not it is present near the site. Any land use that can be observed while in or alongside the stream at the site should receive a "Y" and any that cannot be observed should receive an "N".

H₂O Quality

Record the time (military), ambient air temperature, water temperature (average of 3 instream samples), and pH reading.

(Back of Form)

Stream Width

Measure and record the width of the stream in meters at the downstream end of the reach (0 m) and at the upstream end (75 m).

Benthic Habitat Sampled

You should take 20 one-foot square samples of the best available habitat for macroinvertebrates in your 75m reach. Macroinvertebrates prefer riffles, rootwads, woody debris, leaf packs, macrophytes (plants growing in the stream) and undercut banks. You no longer have to sample in pools, but if rootwads, woody debris, leaf packs, or macrophytes are present in a pool, you may sample them.

Before sampling, walk the reach to determine how much of each habitat type is available. Sample the best available habitat proportionately. (If most of the best available habitat is riffle, sample mostly in the riffles.) Because the D-net is one-foot wide, you can use it to measure a one-foot square sampling area. On the form, record the number of samples taken in each type of habitat.

HABITAT ASSESSMENT FIELD DATA SHEET

You should also fill out the Habitat Assessment Field Data Sheet. Score each parameter according to the criteria listed.