

Boston Harbor Marina Dock Fouling Datasheet

Teacher Explorer Edition - Puget Sound float-edge weirdness, tiny kingdoms, and polite scientific staring

Date/time: _____	Group / teacher name: _____	Weather: _____	Tide / water level: _____
Dock spot: float edge / rope / piling / shaded underside	Water movement: still / gentle / current	Light: sun / shade / night light	Camera/photo #s: _____
Dock Fouling Prime Directive Photograph and observe in place. Do not pry, scrape, relocate, or mix animals in containers. Place is data.	How to Look Start at the waterline, then scan ropes, chains, pilings, shaded undersides, mussel clumps, hydroid bushes, and tunicate carpets.	Abundance Code 0 none 1 single 2 few (2-10) 3 common (11-50) 4 abundant / carpet / cloud	

1) Who is living on the dock? Use broad IDs first. Precision can come later.

Group to look for	Check	What it may look like	Notice / photo clue
Mussels	[]	blue-black shells in clumps; fuzzy byssal threads	What lives between them? tiny crabs, worms, eggs, slugs?
Barnacles	[]	white volcano cones; plates open underwater	Are they feeding with feathery legs?
Tube worms / feather dusters	[]	tubes, spirals, parchments mats, feathery crowns	Are crowns out or retracted?
Hydroids	[]	tiny branching "plants" that are actually animals	Look for nudibranchs, eggs, and bite scars.
Bryozoans	[]	lace, crusts, fuzzy sheets, branching coral-like bits	Flat sheet or upright bush? Hard or soft?
Sponges	[]	crumbly crusts, rubbery blobs, pores, bright patches	Color, holes, texture, and who is eating it?
Solitary tunicates / sea grapes	[]	little squishy sacs with two siphons	Single grapes or clusters? Do not squeeze the poor bean.
Colonial tunicates	[]	clear jelly mats, star patterns, orange/red/cream carpets	Look for repeated tiny zooids and shared openings.
Anemones	[]	tentacle crowns; orange/white/green; sometimes closed blobs	Tentacles open? Attached to dock, rope, shell, or mussel?
Sea stars	[]	tiny stars to big predators; often under edges	Count arms. Any feeding posture?
Crabs / shrimp / amphipods	[]	sideways scuttlers, tiny jumpy commas, transparent ghosts	Who hides when light hits them?
Snails / limpets / chitons	[]	grazers on algae, film, sponges, bryozoans	Look for scrape trails or feeding edge.
Flatworms	[]	paper-thin gliding ribbons; often patterned	Does it ripple, glide, or vanish into the slime dimension?
Nudibranchs / sea slugs	[]	tiny jeweled predators; dorids, aeolids, dendronotids	Photograph in place with food/eggs/background.

Field ethic: observe gently, photograph generously, leave every creature where its tiny weird life was happening.

2) Habitat clues: where exactly was the creature? Name a creature in each box

☐ float edge	☐ rope / line	☐ chain / metal	☐ piling
☐ shaded underside	☐ mussel clump	☐ hydroid bush	☐ tunicate / sponge carpet

3) Behavior bingo, check off when observed:

☐ feeding	☐ egg mass	☐ predator near prey
☐ filter feeding	☐ camouflage	☐ competition for space
☐ regrowth / damage	☐ juveniles	☐ mystery interaction

Dock Fouling Field Notes

4) Choose one organism and do a 3-minute naturalist stare.

Organism / broad group:	_____
Exact microhabitat:	_____
Color, shape, texture:	_____
What is it attached to or touching?	_____
What is it doing?	_____
What would you photograph for ID?	_____
Mystery organism sketch box	I think it might be: _____ Evidence I used: _____ One thing I still wonder: _____ Photo numbers / iNat notes: _____

6) Teacher reflection: turn the dock into a lesson.

A claim students could make:	Evidence they could collect by observation :	A question that opens the portal:
_____	_____	_____
_____	_____	_____
_____	_____	_____

Dock Goblin Mini-Guide: beginner-friendly ID clues

If it looks like a plant... - It may be a hydroid, bryozoan, algae, or worm crown. - Ask: does it branch? retract? have tiny cups? feel calcified?	If it looks like slime/jelly... - It may be colonial tunicate, sponge, egg mass, or microbial goo. - Ask: repeated star patterns? pores? individual dots? attached carpet?	If it is moving... - Look for snails, chitons, crabs, amphipods, flatworms, nudibranchs. - Ask: is it grazing, hunting, hiding, or surfing the dock chaos?
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