

Key to the Commonest Harbor Ascidians in Washington
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Charles Lambert / Gretchen Lambert

1. Solitary ascidians; each zooid enclosed in its own tunic.....2
 Colonial ascidians; multiple zooids within a common tunic.....12
2. Body globular or cuboidal, white or gray, kidney present, oral siphon with 6 lobes,
 atrial siphon with 4 lobes, kidney present.....*Molgula manhattensis*
 Body cylindrical or flattened, no kidney, usually same number of lobes in each
 siphon.....3
3. Body flattened, attached broadly on left side, tunic thin, transparent, papillated.
*Ascidia columbiana*
 Body cylindrical, but not flattened when alive; attached at posterior end.....4
4. Oral tentacles branched, generally thick and leathery tunic.....5
 Oral tentacles simple, generally thin flexible tunic except for *Styela*.....7
5. Body covered with flexible spines.....6
 Body not covered by flexible spines, tunic thick, leathery, reddish, long siphons; 6
 branchial folds per side.....*Pyura haustor*
6. Attached to substrate by narrow stalk, tunic reddish brown, tunic spines
 unbranched.....*Boltenia villosa*
 Broadly attached to substrate by posterior end, tan to brown, tunic spines
 branched.....*Halocynthia igaboja*
7. Tunic opaque, leathery; 4 branchial folds per side..... 8
 Tunic transparent or translucent, no branchial folds9
8. Attached to substrate by narrow stalk, more than 4 long slender gonads on each side.
*Styela clava*
 Broadly attached to substrate by posterior end, stalk absent, 2 slender gonads/side.
*Styela gibbsii*
9. Siphons on oval disk at anterior end, tunic translucent; disk contains numerous small
 oval plates with concentric growth rings.....*Chelyosoma productum*
 Siphons not on flat disk, tunic transparent.....10
- 10 Straight stigmata; white, yellow or orange pigment flecks in body wall, much longer
 than wide.....*Ciona savignyi*
 Spiral stigmata, white pigment spots in body wall, nearly as wide as long.....11

11. Body about as wide as long, enlarged atrial brood chamber, rectum less than half the length of the body.....***Corella inflata***
 Body slightly longer than wide, no atrial brood chamber, rectum more than three fourths the length of the body.....***Corella willmeriana***
12. Multiple zooids connected by stolons.....***Perophora annectens***
 Multiple zooids all embedded in common tunic.....13
13. Colony thick and slab-shape, or mushroom shaped lobes.....14
 Colony thin, flat and encrusting.....16
14. Colony mushroom shaped opaque lobes, zooids located in uppermost “cap” of lobe; colony usually purple or tan, zooids around 4 mm in length, bodies of 2 regions (thorax and abdomen).....***Distaplia occidentalis***
 Colony flat-topped slab or sheet, bodies include 3 regions (thorax, abdomen, post-abdomen).....15
15. Colony a smooth or irregular slab-like sheet, 1-3 cm thick, zooids tan, yellowish or orange–brown, 8-12 rows of stigmata.....***Aplidium californicum***
 Colony a flat-topped slab up to 5cm thick, zooids generally red or orange brown, 14-15 rows of stigmata.....***Aplidium solidum***
16. Zooids not divided into regions; vascular ampullae present in tunic.....17
 Zooids divided into thorax and abdomen; vascular ampullae absent in tunic.
***Diplosoma listerianum***
17. Colony often multicolored, zooids recumbent (horizontal to substrate) and organized into star-shape systems, colors variable, small tadpole with 8 ampullae.
***Botryllus schlosseri***
 Colony always single color, zooids upright (vertical to substrate), often not in well-organized systems, but where systems are discernable they are elongate (rows) and definitely not star-shape, large tadpole with about 30 ampullae...***Botrylloides violaceus***

Not included in key:

Didemnids with small white, spheroid , star-shaped spicules in tunic. Colonies are thin, flat and encrusting. (These could be several species of ***Didemnum*** or ***Trididemnum***.)