Oregon Sea Grant Extension
Sustainable Tourism &
Outdoor Recreation Program

Interpretative Fact Sheet
Gooseneck Barnacle (*Pollicipes polymerus*)

The following short article is from the *Oregon Coast 101 Species* collection used by the Guide and Outfitter Recognized Professional (GORP) training program. These articles are intended to provide interesting facts you can share with your clientele and add value to your services.

An Interpretive Fact Sheet has been written about each species. We are currently uploading these blogs and creating the links.

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Gooseneck Barnacle (Pollicipes polymerus)

tourism.oregonstate.edu/gooseneck-barnacle-pollicipes-polymerus/

By colliek2 September 9, 2020

It survives by hanging on tight…really tight…

'Crusty foulers' will attached to just about anything (from NOAA)

Gooseneck barnacles or Leaf barnacles will stick themselves to almost anything—including each other. Barnacles create a tough, wrinkled brown connector stalk with an amazingly strong, fast-curing glue that is one of the most powerful natural glues known.

Hanging on tight

The glue has a tensile strength of 5,000 pounds per square inch and an adhesive strength of 22-60 pounds per square inch. Researchers are trying to figure out how this glue might be commercially useable. (NOAA)

On the other hand, many a recreational boater is also most likely trying to figure out how to get them off their hulls using a pressure washer. It is not easy, and some boaters call them by their slang name: "crusty foulers." (NOAA, NAVY)

> ***…some boaters call them by their slang name: "crusty foulers.***

Habitat

Gooseneck Barnacles are very common on Northwest coasts, and often abundantly

clustered on rocks, boats, pilings, buoys, whales, and each other in exposed or partially exposed areas.

They survive being exposed to the air by shutting a multilayered 'door' which allows them to conserve moisture. Once out of danger, they open the 'door' to feed. Barnacles send out multiple, feather-like appendages (called cirri) to filter and capture a variety of microscopic larvae, worms, algae, etc. brought in by the water movement.

A struggle for survival

Barnacles constantly struggle against multiple organisms for survival in a very narrow niche. Heavy barnacle growth can have negative impacts to the environment and humans.

If barnacles dominate that niche, it can limit other species (numbers and variety) and degrade their environment.

The U.S. Navy estimates that heavy barnacle growth on ships increases weight and drag by as much as 60 percent. Impact? An increase of 40 percent in fuel consumption! Imagine the impact to a whale!

There are more than 1,400 species of barnacles that are crustaceans like crab, lobsters, shrimp/prawns, etc. Some crustaceans are edible, and the Gooseneck barnacle, is one of them. In the past it was used as a human food source particularly during fasts. Today barnacles are considered more of a food source for local wildlife such as gulls, oystercatchers, and sea stars.

References and where to find more information:

–National Oceanic and Atmospheric Agency, U.S. Dept. of Commerce "What are barnacles?" (https://oceanservice.noaa.gov/facts/barnacles.html)
–Wikipedia articles (very informative) on Goose barnacles and Pollicipes_polymerus (https://en.wikipedia.org/wiki/...)
–Oregon Department of Fish and Wildlife search (https://myodfw.com/search)
–U.S. Navy 'New Hull Coatings Cut Fuel Use, Protect Environment' (https://www.navy.mil/submit/display.asp?story_id=45984)