

The Invasion
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Imagine diving under the surface and being met by an underwater rainforest – a new world. Stems of the lush green kelp forest reach up towards the surface, just waiting to be explored. Scattered throughout the kelp are sheephead, purple urchins, bright orange garibaldi, and leopard sharks. However, when you dive under the water at Catalina Island, this is not the imagery you are met with. Instead of lush kelp forests, all you see are dense beds of weeds. *The invasion has begun.*



Photo Credit: Niko Kaplanis, Scripps

Who is this invader that disturbed the lush kelp ecosystem? The answer: an algal species, *Sargassum horneri* (*S. horneri*), commonly referred to as the devil weed. *S. horneri* is a species native to Asia who hitched a ride in the ballast water of ships and made its way to the California coast. This invasive species was first spotted in Long Beach harbor in 2003, and since then has continued to spread throughout Southern California and down to Baja.

S. horneri poses a major threat to the sustainability of native California marine ecosystems. Their high growth rates, higher temperature tolerance, and long, floating stems may provide a competitive advantage over native giant kelp. In addition to their competitive advantage, the sargassum also been shown to be avoided by most herbivores. All of these factors disrupt the natural marine ecosystem and may cause major changes to kelp ecosystems. Since kelp forests serve as a foundation for one of the most diverse, productive, and dynamic ecosystems on Earth, it is especially important to deal with this invasive species.

There have been efforts to remove *S. horneri* on Catalina Island, but scientists are still piloting methods to determine the most effective solution. Scientists currently use a “super sucker,” an

underwater vacuum, to suck up all the sargassum off the seafloor. In winter 2015, teams extracted 9,000 pounds of the pesky invader!



Photo Credit: Tom Boyd Images

With the spread of marine invasive species expected to increase with the expansion of global trade, it will be especially important for scientists and policymakers to work together to prevent further harm to our lush kelp ecosystems. So get involved and **HELP PREVENT THE SPREAD!**