USU Biologist Justin Jones works with the US Navy to develop a slime cannon to stop boats from escaping | Biology

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The gloopy slime of the hagfish is inspiring an unusual non-lethal weapon

Kids aren’t the only ones who love slime. The US Navy wants to take the gloopy hobby to the next level – by making super-expanding weaponised slime that can trap boats in the water.

Currently, the US Navy stops boats – particularly suspected smugglers – by using a pneumatic launcher that fires a plastic rope designed to get tangled up in the boat’s propeller.

But it is not very environmentally-friendly and is hard to disentangle once fired. Instead, a synthetic version of slime could halt small boats by fouling their propeller and then simply dissolve away later.

Justin Jones and his team at the University of Utah’s have a fifteen-month Navy contract to experiment making slime proteins with this in mind.

They are working on making a usable slime that is inspired by the hagfish, an eel-like creature which deters attackers by projecting a jet of slime, clogging the predator’s mouth and gills. When it comes into contact with sea water,