



SUPPLYFRAME
DESIGNLAB
HACKADAY PRIZE 2020

Conservation X Labs

Conservation

The Mission

Conservation X Labs' mission is to end the global extinction crisis through the democratization of science, mobilizing new talent to work on extinction and climate crises, and ultimately, delivering scalable and impactful solutions. Current trends indicate that endangered species extinction rates may be 1,000-10,000 times greater than background rates.

The Work

Over the past five years, Conservation X Labs' open innovation program and Garage program have inspired and implemented bold ideas for new environmental solutions. Through their grand challenges and prizes for conservation, they have brought together thousands of brilliant individuals from around the globe to develop hundreds of innovations.

The Garage program aims to deliver highly impactful technologies needed in the conservation field, including a platform for bringing user-defined artificial intelligence capabilities to environmental tools such as remote cameras (the Sentinel System), and a low-cost, field ready, handheld DNA analysis tool (the DNA BIT).



Dream Team Challenge

Reducing Ghost Gear: Up to 10% of the world's ocean plastic (and 70% of large pieces) comes from lost or abandoned fishing gear (nets, ropes, lines, pots). This poses a threat to large whales (the Red List estimates that 45% of all threatened marine mammals are impacted) and small crabs (NOAA estimates that there are 145,000 derelict crab pots still "fishing" in the Chesapeake Bay alone, killing over 3 million crabs a year). This problem is compounded in the developing world settings where fishing is less regulated.

This challenge seeks innovations that reduce "soak time" – the time that gear (pots or longlines) has to be left in the water unnecessarily, or deployment in undesirable locations, that increase the chances of snags, or loss.

This includes innovations that notify if the gear has been deployed in an undesirable location, or systems that communicate in a timely fashion to the fisher that the gear has moved location or the target species has been caught.