

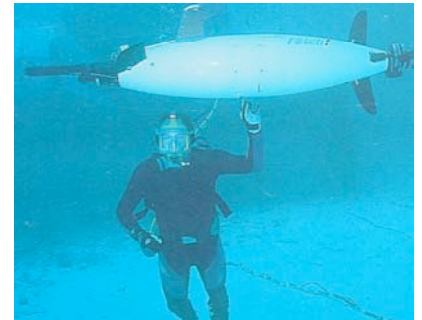
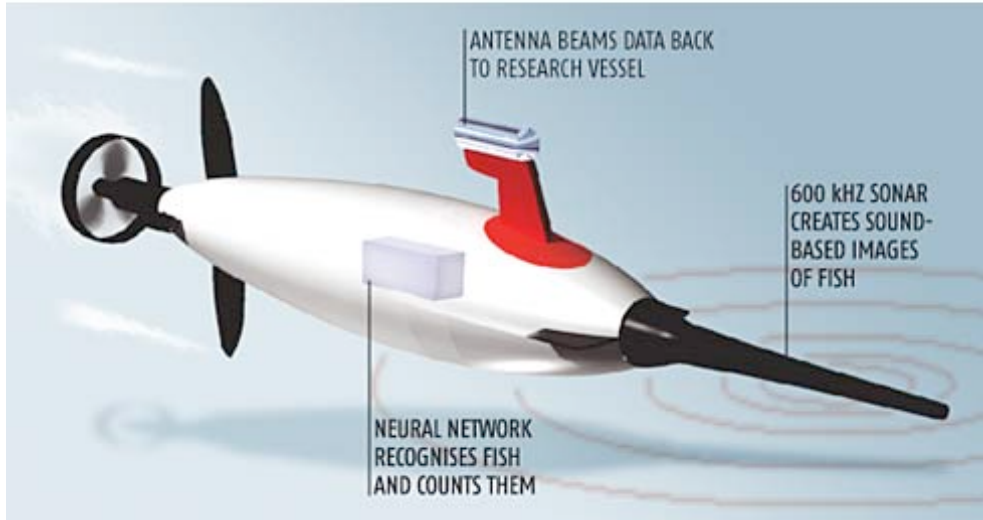
AUTONOMOUS SYSTEMS LABORATORY AT VIMS

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THE FISH-COUNTING SUB



Fetch1 at the NOAA Aquarius underwater habitat, Florida Keys, where it surveyed the nearby coral reef.



Fetch1 surveyed krill using its side scan sonar and u/w video in Antarctica.

ASL develops innovative AUV technology

ASL Mission:

- Develop biomimetic behaviors for AUVs to sample the environment more efficiently
- Develop hardware and software to automate target recognition by AUVs
- Develop methods for submarine wake detection, and track and trail, by AUVs
- Develop easy-to-use, practical mission planning and supervision software for multiple networked AUVs

ASL Areas of Expertise:

- Rapid LabVIEW AUV software development
- Neural network processing and target recognition (US Patent Pending)
- Systems design and hardware integration for small and large AUVs
- Collaborations with Prizm, Northrop Grumman, SAIC, Autosub, University of Delaware CSHEL, University of New Hampshire CCOM
- AUV field experience in Antarctica, Florida Keys, Chesapeake Bay, Gulf of Mexico, and US West Coast



ASL personnel have designed and built larger AUVs. This vehicle has a 500 lb payload capacity, and active buoyancy control. Prizm, a commercial AUV manufacturer, is a founding sponsor of the ASL.