

FSU Academic Diving Program Fiscal Year 2019 Activity Report

The FSU Academic Diving Program (ADP) oversees and supports underwater research conducted by FSU faculty, students, and staff, and visiting scientists. The Diving Control Board governs scientific diving operations with representative members from each invested department of the University. Day to day operations are managed by the Diving Safety Officer, with assistance provided by the staff of the Florida State University Coastal and Marine Laboratory. This report summarizes the activity of the ADP in fiscal year 2019.

Diving Activity

The ADP facilitated underwater research for 58 active FSU Scientific Divers (Figure 1). Active divers are those training for, or contributing to, research at FSU using SCUBA diving as a tool. FSU Scientific Divers include individuals from the Coastal and Marine Laboratory and the departments of Anthropology, Biological Science, Earth Ocean and Atmospheric Science, and Geography. The number of active divers has increased over the past 3 years in response to developing research programs in Biological Sciences and Anthropology.

Biological Science consistently accounts for the largest portion of activity, with 28 divers logging 1070 dives in FY 2019. Collectively, divers across FSU logged 1695 dives, spending nearly 1500 hours in the field working underwater (Figure 2). Divers include undergraduate students, graduate students, research staff, postdoctoral researchers, and faculty.

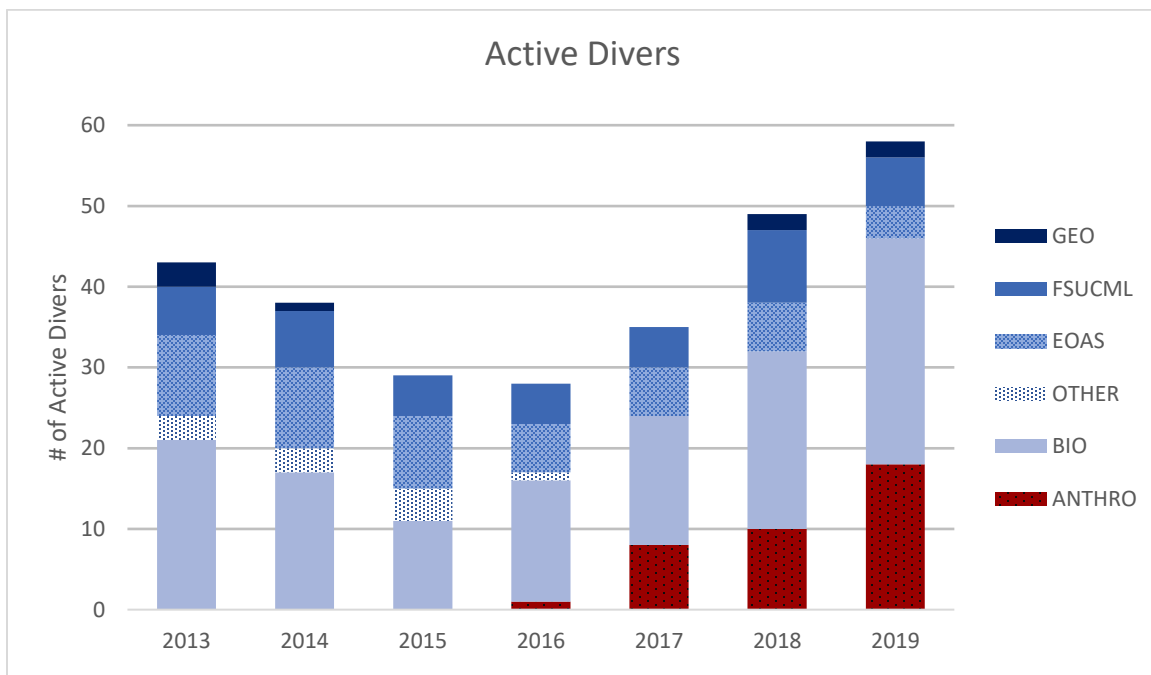


Figure 1. Annual changes in the number of active divers over time by department. Data are organized by fiscal year. ANTHRO = Anthropology; BIO = Biological Science, EOAS = Earth Ocean & Atmospheric Science, FSUCML = Coastal & Marine Laboratory, GEO = Geography, OTHER = All Other Departments.

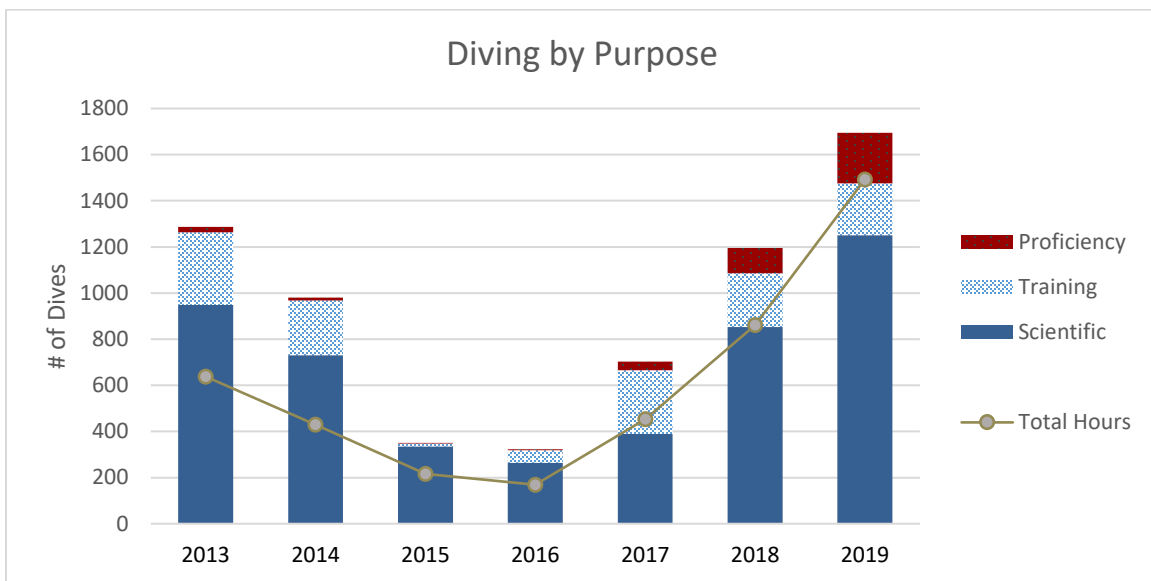


Figure 2. Annual changes in the total number of dives in three categories: proficiency, training to become scientific divers, and scientific dives. The line depicts the total number of hours spent diving.

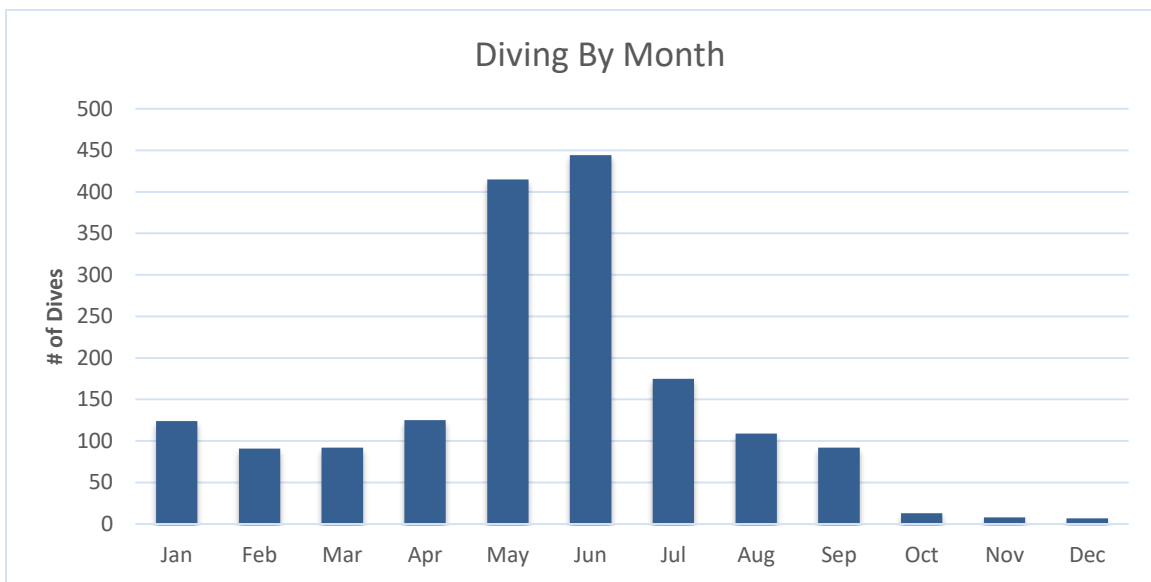


Figure 3. Diving FY 19 diving activity by month. 167 equipment requests were made to ADP, most of them in May and June.

Diving Locations

In FY 2019, training dives were focused at Morcom Aquatics Center and various north Florida karst features; boat diving and marine training operated from the Coastal and Marine Laboratory.

Scientific dives occurred across Florida and extended internationally. Underwater archaeological digs in Florida continue to unveil elements of prehistory; biologists from multiple lab groups launched studies into the processes influencing coral reef resilience in French Polynesia; Research into the biology and ecology of marine invertebrates and fishes continues in the Gulf of Mexico, Mediterranean, Panama, Belize, Bonaire (Dutch Caribbean) and British Columbia.

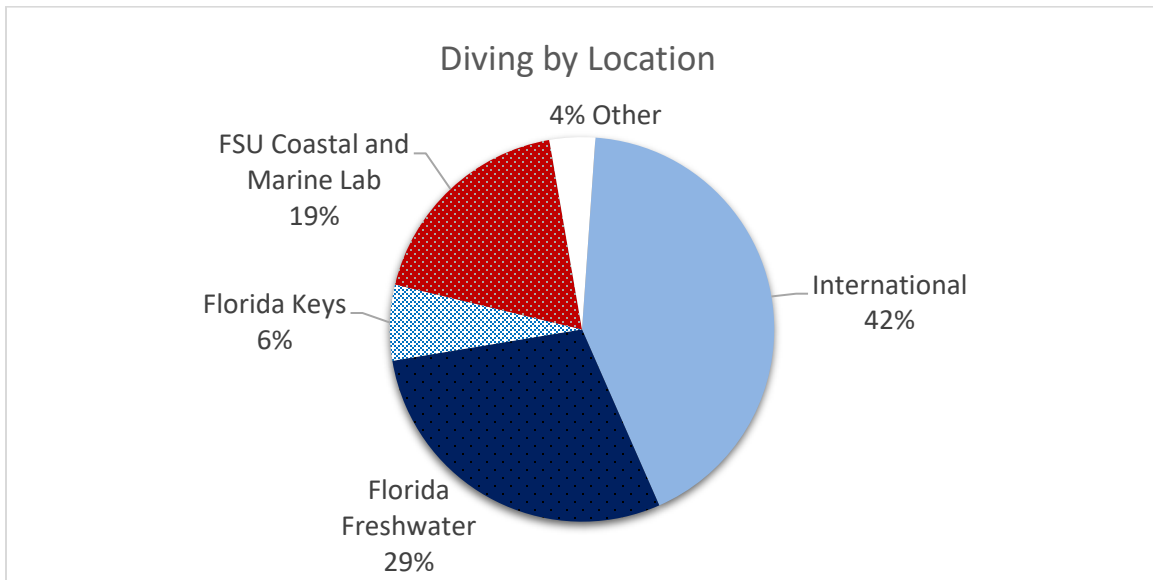


Figure 4. Percent of total FY 2019 dives by location.

Incidents

A total of four Incident Reports were filed and submitted to the Diving Control Board from FY 2019. None resulted in injury to divers. All four resulted from equipment malfunctions, including four reports of issues using factory serviced regulators purchased in 2018. Responsive action from ADP included a manufacturer supported recall of regulators and a total inventory replacement of an older model diving computer.

Financials

The Academic Diving Program has three sources of funding: a general operations allotment provided by the Coastal and Marine Laboratory (provided through budget from the Office of Research (OVPR); workshop fees and equipment rentals; and variable subsidies directly from the OVPR.

The operations allotment provides \$7k annually for essential supplies, expenses and travel of the DSO to AAUS meetings every other year. Workshops and equipment rentals fees are processed through an auxiliary account that totaled \$10.5k in revenue in FY 2019, including \$1.7k in revenue generated through use of ADP resources by outside organizations (Florida Fish and Wildlife Conservation Commission, Florida Bureau of Archaeological Research, etc.). An additional subsidy from OVPR provided \$7.5k for the hire of temporary instructional personnel for the months of January – April for the Scientific Diver workshop. Finally, a May 2018 OVPR subsidy for \$13.4k was used to purchase new SCUBA equipment.

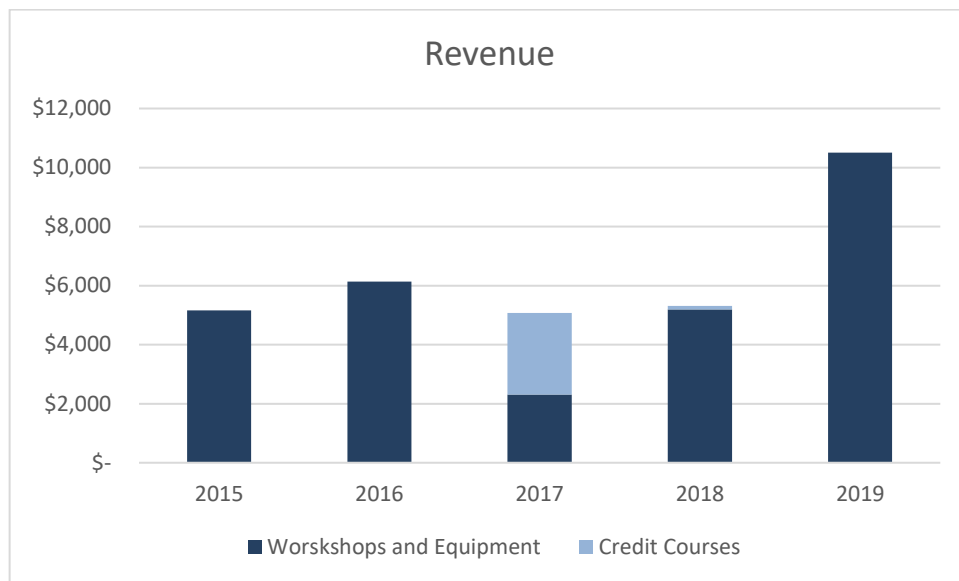


Figure 5. Year-end revenue from workshops and equipment rentals (Aux budget 224003) and credit courses (Aux budget 224008).

Summary

The increase in scientific diving at FSU over the past three years, and the anticipated growth over the next few years, is reflective of burgeoning underwater research programs and it coincides with a record year in university wide research funding. However, with growth comes the need to increase the capacity of the dive program to keep up with the growth in diving activities. To ensure ADP can continue to support all ongoing research diving needs and maintain its high safety standard, supplemental funding is required in FY 2020. The top priority should be securing funding to replace aging diving equipment and to increase and improve ADP's inventory of SCUBA equipment. The second priority should be the extension of the seasonal OPS Assistant Diving Instructor to include the busiest months of the year, May and June. A proposal for each will be submitted to OVPR in FY 2020 after input from the DCB.