

Turtle Cove Environmental Research Station
CY 2024 Institutional Effectiveness Special (Annual) Report
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OVERVIEW OF PROGRAM RESOURCES and I.E. TIME-FRAME

Calendar year 2024 was the Turtle Cove Environmental Research Station's 40th year of operation as a program supporting environmental research, university education and public outreach activities for Southeastern Louisiana University and the surrounding regional community it serves. Turtle Cove is a member of the multi-national Organization of Biological Field Stations (OBFS), and is a primary means of access to the Lake Pontchartrain Basin Estuarine System via two primary sites: (1) the Boatshed/Classroom/Parking Complex on Galva Canal in Manchac (built by Southeastern in May of 2005), and; (2) the main Guest House Field Station/Boardwalk/Caretaker Residence on the south-shore of Pass Manchac on the Manchac Wildlife Management Area (WMA) - accessible only via a 20-minute boat ride from the Galva Boatshed. The historic Schlieder Lodge was built in 1908 by Mr. Edward Schlieder, a businessman from New Orleans. The lodge, bulkhead, wharfs, boardwalk and Caretaker Residence all underwent a \$6+ million FEMA-funded restoration after Hurricanes' Katrina and Rita in 2005. Southeastern has a 99-year lease and partnership with a 25-year option with the Louisiana Department of Wildlife and Fisheries (LDWF) to operate Turtle Cove since 1985.

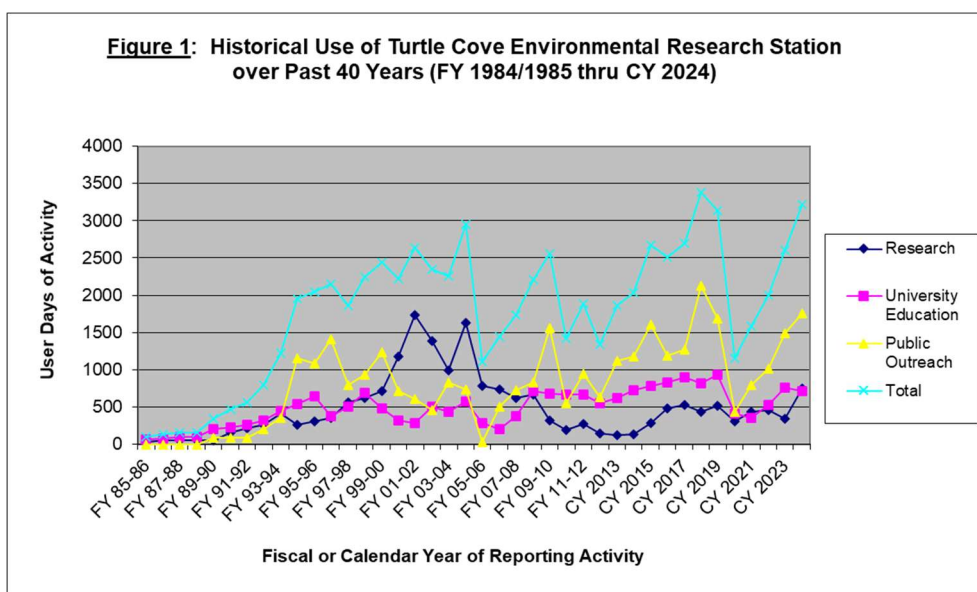
Turtle Cove "resources" for purposes of annual Institutional Effectiveness (I.E.) reporting includes: the two facility sites and related infrastructure; staff (3 full-time positions and two part-time GA positions); fleet of boats, motors and trailers (including a new 30' Aluminum Cabin Workboat, lake skiffs and mud-boats of all sizes and a 40-ft pontoon boat that can transport 35 passengers), and other equipment and supplies (i.e., 20 canoes/pirogues, water quality probes, dip-nets, field-guides, binoculars, microscopes, computers, satellite-internet service at both sites, and other tangible field research and educational items), all of which support the stakeholders and users of Turtle Cove. Physical exhibits at both Turtle Cove and in the Sims Memorial Library on the Southeastern campus, as well as two documentary videos, help showcase to the broader

Southeastern community both the history of Turtle Cove and the history of the Manchac Swamp Ecosystem in which it resides.

HIGHLIGHTS OF USE DATA - CY 2024

User days of activity recorded in 2024 showed an overall increase from 2023 (+23.8%). The research program had the highest growth with a 116% increase in user days, due primarily to the extensive work conducted through Southeastern's Lake Maurepas Monitoring Project (LMMP). User days dedicated to monitoring efforts more than doubled from 2023 (231 user days) to 2024 (548 user days). The public outreach program grew by 17.8%, while university education decreased by 6.5% due to fewer Southeastern-related field trips in 2024 than 2023. However, user days from Southeastern courses under the education program continued on a positive trajectory via the ongoing Art and the Environment class taught at Turtle Cove.

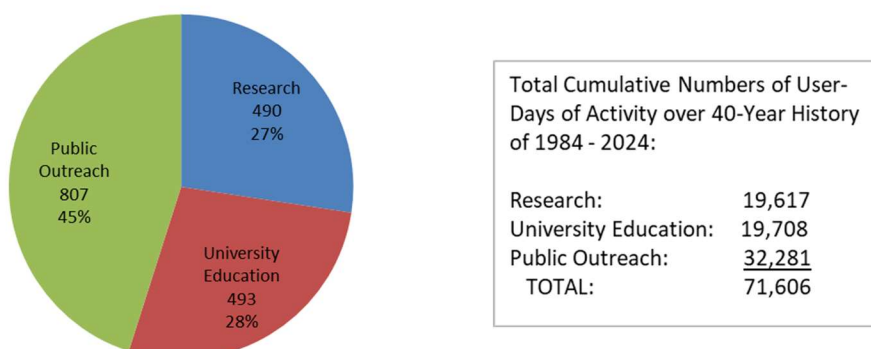
In summary, Turtle Cove resources supported 106 different groups composed of 2,273 different individuals and 3,222 user days of activity. The number of groups, different individuals, and user days recorded under each program, respectively, were as follows: research (23, 163, 750); university education (26, 463, 710); and public outreach (57, 1,647, 1,762). The 40-year history of use of Turtle Cove beginning with fiscal year 1984/85 is shown in [Figure 1](#) below.



Note: Hurricane's Katrina/Rita (2005), Gustav/Ike (2008), Isaac (2012) and IDA (2021) all resulted in long-term closures of the station and associated reduction in use. CY's 2020 and 2021 were impacted significantly by both the COVID-19 pandemic as well as record Atlantic hurricane seasons, leading to the most drastic year-to-year reduction in use recorded to date (CY 2020).

The average annual use among categories and cumulative user day totals in research, university education, and public outreach programs over the entire 40-year operating history of Turtle Cove are presented in [Figure 2](#) below.

**Figure 2: 40-Year Average Annual Use of Turtle Cove per Category:
1984 thru 2024 (based on User-Days of Activity)**

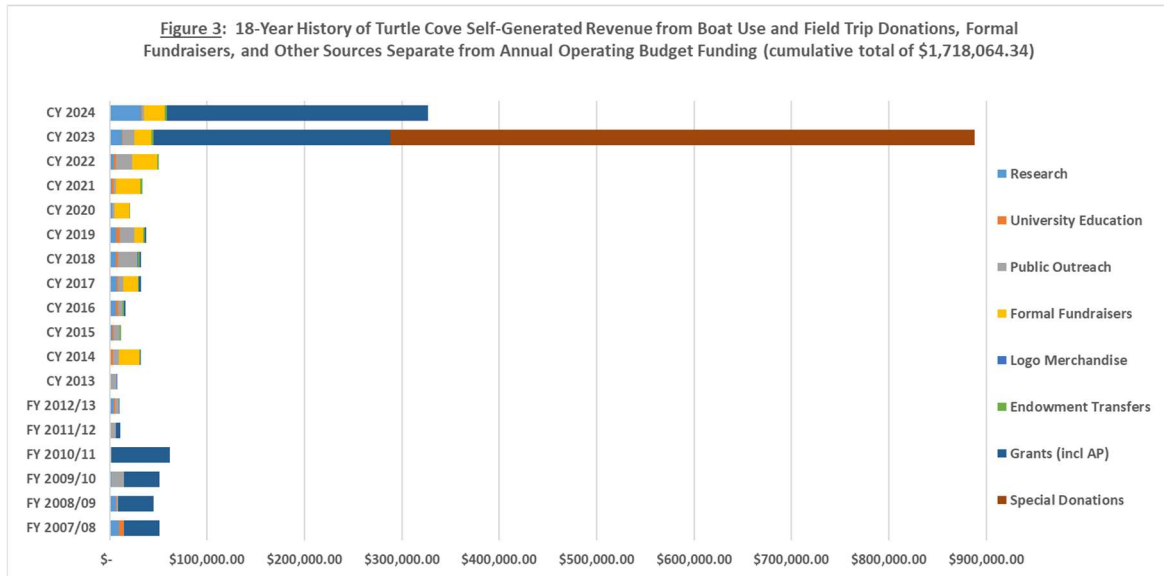


SELF-GENERATING FUNDS and ANNUAL GIVING DAY PARTICIPATION

Turtle Cove had another outstanding year for raising external revenue in 2024, with a total of \$327,106.00 generated. The funds granted from Air Products for the LMMP (\$258,430) was the primary contribution to the 2024 budget. Turtle Cove also secured \$21,295 during Southeastern’s annual Giving Day fundraiser and received a \$10,000 grant from the National Wildlife Federation (NWF). The other categories of external funds included the following: funds from the LMMP research teams for use of Turtle Cove equipment and facilities (\$32,000); donations from public outreach groups (\$2,840); and donations from workshops and university education field trips (\$590). Lastly, annual transfers made from three Turtle Cove-specified endowments managed by the Southeastern Foundation provided \$1,951 in funds.

These external funds allowed for several enhancements to facilities and education/outreach programs in 2024. A new 110-gallon fuel tank trailer for all Turtle Cove users at the Galva Canal Boatshed Complex was secured in early spring. Turtle Cove was able to organize an open house event showcasing LMMP research findings in the summer of 2024 and has continued overseeing the completion of the project-related documentary through the NWF grant. New interior features for the Schlieder Lodge (guest house) were purchased, including kitchen and bathroom cabinets, sinks, and appliances for a comprehensive restoration. Educational materials such as bone replicas, study skins, species reference guides, and new offsite outreach displays were also acquired in 2024. Finally, several repairs to vessels including motor replacements and fiberglass restorations were made possible through these funds.

Figure 3 below is a graph that represents self-generated funding at Turtle Cove over the most recent 18-year period from all sources outside of the annual operating budget. Going back 18 years coincides with the approximate time-frame that outside funding efforts became more of a focus at Turtle Cove.



Note that special donations and formal fundraising events are now categorized separately from other revenue sources since they have become more significant in recent years. Also note that the formal fundraisers in 2014 and 2017 were on-site, whereas those in 2019 – 2024 were online as part of the university’s Giving Day program.

SATISFACTION SURVEY

Our overall satisfaction ratings for Turtle Cove continue to be very positive based on our annual Turtle Cove Satisfaction Survey. We had 18 individuals who responded to the survey and of those 17 (94.4%) of respondents rated us a “5” on the question of how “Overall satisfied with Turtle Cove resources” they were. The scale ranges from 1 (not at all satisfied) to 5 (very satisfied) – the only other respondent selected “Not Applicable.” Details of the survey results were as follows: 1 (0.0%); 2 (0.0%); 3 (0.0%); 4 (0.0%); 5 (94.4%); N/A (5.6%); n=18. These figures are comparable to all prior year’s annual satisfaction survey results which started in CY 2012. All of the narrative responses were also very positive regarding “satisfaction” with scheduling and use of boats and facilities, infrastructure, educational/outreach programs and staff.

BOATING SAFETY

Finally, and as always most importantly, another year of work was conducted in a water based-environment at Turtle Cove without incident in terms of health and safety issues (i.e., “boating safety”) for all users of Turtle Cove resources, including university faculty, staff and students, as well as others from the surrounding communities who participated in our programs. This is always our most important measure of success at Turtle Cove each year.

CONCLUSION and FUTURE PLANS

Calendar year 2024 was another successful year for all Turtle Cove programs, external revenue generation, and facility and resource enhancements. The research and public outreach programs showed increases in user day activity, indicating growth of the LMMP and recovery from Hurricane Ida and Covid-19 impacts. Current post-IDA Turtle Cove ERS renovations are expected to be completed in 2025. The roof replacement and some interior projects were completed in 2024 but bathroom, kitchen, and boardwalk repairs are still underway. In order to avoid temporary pauses in our education and outreach programs during boardwalk construction, we will continue visitation to the Turtle Cove ERS and introduce new activities focused on the vegetation and wildlife present around the Galva Canal Boatshed as well as the LMMP. We are currently working with researchers from the aquatics and wetlands monitoring teams on the development of educational activities which will showcase the field methods used for the project.

Turtle Cove was able to expand its monitoring project-related outreach through an NWF grant and purchase significant additions and improvements for both Turtle Cove facilities, boat fleet, and education and outreach programs with additional external funding. The remaining restoration budget will include a new and more sustainable boardwalk behind the station, built with fiberglass grated walkway material (instead of wood) which has several environmental and resiliency benefits. This mitigation option for the new boardwalk is funded primarily by FEMA (90%) along with a 10% cost-share provided by Turtle Cove's Foundation (self-generated) funds.

In the next one-three years, we hope to obtain additional external funding that will go toward the hiring of two new staff persons for the growing education/outreach and fleet maintenance and operation, and expansion of the Galva Canal Boatshed/Classroom Complex and adjacent infrastructure. The infrastructure enhancements will include a second bathroom in an expanded upstairs classroom, new boat slips and an on-site launch, and a new boardwalk there in the Galva Marsh, all of which will allow us to host larger field trips and other outreach events in the future, and doing so when minor weather conditions prohibit use of boats to the research station itself.

The Turtle Cove Environmental Research Station is a facility and program of Southeastern Louisiana University that continues to evolve, and doing so in an environmentally sustainable way. Turtle Cove is rich in community pride and productive history, and now, more than ever, an on-going staple of environmental research, university education and public outreach---as well as an important example of sustainability in terms of resiliency and adaptation--in the region that we serve. For more information on all our programs, please visit our website at: www.southeastern.edu/turtlecove.