Turtle Cove Environmental Research Station
Institutional Effectiveness Report: Calendar Year 2019:
Special (Annual) Report Section Highlights (1/1/19 – 12/31/19) (PDF version)

OVERVIEW OF PROGRAM RESOURCES and I.E. TIME-FRAME

The Turtle Cove Environmental Research Station (ERS) had another of its most productive years of operation in terms of overall use and productivity, and its highest ever in self-generated funding activities, in Calendar Year 2019. This was the station’s 35th 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 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 guest house was originally built in 1908 by Mr. Edward Schlieder, a businessman from New Orleans. The guest house, bulkhead, wharfs, boardwalk and Caretaker Residence all underwent a $6 million FEMA-funded restoration after Hurricane’s Katrina and Rita in 2005. Southeastern has a 99-year lease 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 (2 full-time positions and two part-time GA positions); fleet of boats, motors and trailers (including 10 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/kits/dip-nets/field-guides/microscopes, computers, satellite-internet service at both sites, and other tangible field research and educational items), all of which supports 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 a new video documentary, 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

Overall use of Turtle Cove resources for research, university education and public outreach activities in Calendar Year 2019 made it the second most productive year in the 35-year history of the station, and included significant gains in research (+18.12%) and university education (+13.4%) activities over the previous year, which has been an on-going goal. The total number of different individuals to use Turtle Cove resources was 2,533, while the total number of user-days of activity again surpassed the 3,000 level for only the second time at 3,139. For CY 2019, use of Turtle Cove resources for research was 515 user-days of activity. University education use (931 user-days) for CY 2019 is now the highest year on record. The public outreach component, which had its highest year ever in CY 2018, decreased to 1,693 user-days of activity, now second highest in history. Overall total user-days of activity for all categories totaled 3,139 (2nd highest in history), a 7.16% decrease over the previous year, due mostly to a slight decrease in K-12 school groups.

In summary for CY 2019, Turtle Cove resources supported 120 different and distinct groups of users (down 5.51% from CY 2018), totaling 2,533 different individuals (down 16.34% from CY 2018) and 3,139 user-days of activity (down 7.15% from CY 2018). The number of different groups, number of different individuals, and number of user-days, respectively, were as follows: RESEARCH (28, 149, 515); UNIVERSITY EDUCATION (28, 741, 931); and PUBLIC OUTREACH (60, 1643, 1693). The history of use of Turtle Cove, starting in FY 1984/85 (fiscal years originally used for data collection), is presented in Figure 1 below, in “user-day” format.

![Figure 1: Historical Use of Turtle Cove Environmental Research Station over Past 35 Years (FY 1984/1985 thru CY 2019)](image)

Note: Hurricane’s Katrina/Rita (2005), Gustav/Ike (2008) and Isaac (2012) resulted in long term closures of the station while under repair, although most all activities continued with boats, as available.
The breakdown of use among categories over the entire 35-year operating history of Turtle Cove is presented in Figure 2 below:

**Satisfaction Survey**

The overwhelming majority of all users of Turtle Cove who were "Overall satisfied with Turtle Cove resources" on a scale of 1 (not at all satisfied) to 5 (very satisfied) was over 4 out of 5 by over 89% of all respondents, with a breakdown as follows: 1 (3.6%); 2 (0%); 3 (0.0%); 4 (7.1%); 5 (82.1%); N/A (7.1%); n=28. These figures are comparable to all prior year’s annual survey results which started in 2012.

**Self-Generating Funds and First Giving Day Participation**

More than ever, Turtle Cove continues to emphasize generating funds from sources external to the university’s annual operating budget, and even though CY 2019 did not include a “formal fundraiser” event, it produced the largest self-generated year of funding in the history of the station at $36,070.50, (over $5,000 more than the previous year’s all time record of $30,201.50). This surprisingly high dollar figure was due in large part to two substantial contributions/events: one memorial gift of $10,000 by a Southeastern faculty member to fund a new kitchen renovation, and another for $5,000 that was part of the $9,300 proceeds from our first “Giving Day” participation, which allowed for the purchase of a new 70-hp motor for the Turtle Cove Brown Boat. Many of the donors to Turtle Cove continue to be inspired after viewing our now one-year old documentary video “Troubled Waters: History of the Manchac Swamp Ecosystem and Turtle Cove” and from the work done by the station in general. The video was produced by Turtle Cove staff and the Southeastern Channel at a cost of $1,500 to document – and further illustrate – the “Manchac/Turtle Cove Artifacts Exhibit” produced the previous year. The video also concludes with a passive theme of fundraising support for the station and its programs, and is obviously having a positive impact on all of our fundraising efforts.

Amounts of non-operating (external) funds generated in 2019 include: gas and facility-use donations for researcher use of Turtle Cove equipment and facilities ($6,500); donations received from field trip activities for university education activities ($3,200), and individuals like...
the donors mentioned above as well as K-12 school groups and other general outreach groups that are able to provide support for their field trip experiences ($24,790), and; sales of Turtle Cove-specific logo merchandise ($200). Finally, since 2014, annual transfers are made from three Turtle Cove-specified endowments managed by the Southeastern Foundation that totaled approximately $1,380.50 last year.

Figure 3 below is a graph that represents Self-Generated funding at Turtle Cove over the most recent 13-year period from all sources outside of the annual operating budget—this is the approximate time frame that outside funding efforts became more of a focus at Turtle Cove.

Figure 3: Most Recent 13-Year History of Turtle Cove Self-Generated Revenue from Boat Use and Field Trip Donations, and Other Sources Separate from Annual Operating Budget Funding
Note: 2014 and 2017 had formal fundraisers

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 perhaps our most important measure of success at Turtle Cove each year.

STATUS/NEEDS/CONCLUSION

Turtle Cove has steadily increased its productivity over time and has become an efficient and sustainable entity given a time of on-going nation and state-wide budget constraints that started during the 2008 recession. One of our most positive purchases from 2019 included the second (in two years) boat motor for the Turtle Cove 18 ft Brown Boat, one of the two most easily towed boats for researchers around the Lake Pontchartrain Basin Estuarine System. Since 2018, 2 of 9 of our outboard motors have been replaced, and we aim to continue that trend until the entire fleet has new motors. In addition, general repairs to all of our boats, and to infrastructure at our two sites (boardwalks, wharfs, buildings, etc.) were conducted. Major needs in the short-
term include continual repairs to the aging fleet and all facilities. New outboard motors for the Pontoon Boat (2) and at least two skiffs will be needed in the coming years (approx. $10,000 per motor). And a recently discovered need we may need to address sooner rather than later is the now 12-year old steel bulkhead at Turtle Cove from salt-water corrosion.

Overall, Turtle Cove status is perhaps best described now as being a very successfully sustainable program. The holistic operation (facilities, staffing, funding, productivity, etc.) is at or near peak efficiency and sustainability levels, and we look forward to many years of continued service for all of our stakeholders. The staff of Turtle Cove considers itself stewards of this well-known “gem of Southeastern” – a facility steeped in history, rich in community pride, and now, more than ever, an on-going staple of environmental research, university education and public outreach in our region. For more information on our programs, please visit our website at: www.southeastern.edu/turtlecove.