

BEST PRACTICES FOR SURVEYING NESTING COLONIAL WATERBIRDS WITH DRONES



Workshop offered by the Harte Research Institute for Gulf of Mexico Studies and hosted by the TAMU-CC Lone Star UAS Center Of Excellence and Innovation

JULY 27, 2022
8:00AM-5:00PM

TAMU-CC LONE STAR UAS CENTER
10201 S. Padre Island Dr, Corpus Christi, TX 78418

WORKSHOP OVERVIEW

In-person workshop designed to provide an overview of best practices for using rotor drones to survey nesting colonial waterbirds. Aimed at professionals responsible for surveying colonial waterbirds, or users of waterbird nesting data collected from a drone. Taught by experienced researchers and practitioners using drones and conducting waterbird surveys.

This workshop provides an awareness of steps for conducting drone surveys of nesting colonial waterbirds using scientifically-sound practices that minimize impacts to birds and produces high-quality data. Participants will engage in all steps of preparation and use of drones for waterbird colony surveys, including manipulation of imagery such as building 3-D images using structure-from-motion software, as well as an opportunity to pilot a drone.

This workshop was made possible by a Harvey Weil Sportsman/Conservationist Award to the Harte Research Institute for Gulf of Mexico Studies. The Lone Star UAS Center of Excellence and Innovation generously provided use of their testing facility.



Registration is free and lunch will be provided to registered participants.



WORKSHOP TOPICS

- Overview of colonial waterbird survey techniques and data types
- Navigating the drone regulatory requirements
- Photogrammetry
- Pilot training
- Equipment options
- Drone survey methods and demonstrations
- Image-processing software and hardware options
- Student test flights (commercial drone or participant's personal drone)



REGISTER TODAY!

Scan or click the QR code
to register for the workshop



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FEATURED INSTRUCTORS

DR. DALE GAWLIK

Endowed Chair for Conservation and Biodiversity,
Harte Research Institute for Gulf of Mexico Studies,
Texas A&M University-Corpus Christi

DR. MICHAEL STAREK

Associate Professor,
Engineering and Computer Science
Texas A&M Corpus Christi

HANK ARNOLD

Drone Pilot and Waterbird Surveying
Volunteer, Texas Audubon

TREY BARRON

Wildlife Diversity Biologist,
Texas Parks and Wildlife

ROSTAM MIRZADI

Graduate Student, Conservation and Biodiversity Lab
Harte Research Institute for Gulf of Mexico Studies,
Texas A&M University-Corpus Christi

WORKSHOP SCHEDULE (TENTATIVE)

CLASS COMPONENT	INSTRUCTOR	TIME
Coffee - Arrival		8:00 AM
Welcome	Sanderson/Gawlik	9:00 AM
Colonial Waterbird Survey Techniques	Gawlik	9:10 AM
Fundamentals of Photogrammetry	Starek	9:30 AM
Break		10:30 AM
Navigating Drone Regulatory Requirements	Barron/Mirzadi	10:55 AM
Pilot Training	Arnold	11:15 AM
Equipment Options	Mirzadi	11:35 AM
Lunch		12:05 PM
Survey Mission Planning	Arnold	1:05 PM
Image Processing	Mirzadi	1:35 PM
Break		2:35 PM
Student Test Flights	Mirzadi/Arnold	3:00 PM
End		5:00 PM



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