

WELCOME to PRIMER/PERMANOVA at Weedon Island

Walt and Karilyn Jaap welcome all the participants to the March 2019 PRIMER Advanced Multivariate Statistical Workshop. It is our pleasure to be your hosts and assist with any and all details to make the workshop work best for you. Marti Anderson will lead the workshop; she is brilliant, skilled, knowledgeable, and easy to work with. Marti is a statistician and ecologist at Massey University's New Zealand Institute for Advanced Study in Auckland. During her career, she has developed novel multivariate statistical techniques to analyze variation in ecological communities, using computer-intensive algorithms for modelling species' distributions in space and time. You can be assured of excellent explanatory lectures about PRIMER 7's many features and an in depth explanation and details about the PERMANOVA package of analytical applications. Please link to this to learn more about Marti: http://www.massey.ac.nz/massey/about-massey/news/article.cfm?mnarticle_uuid=2E191148-35AD-49F5-A9C0-9CBEDA1DA3D4

To assist you with your wardrobe considerations, March 4th to 8th in Saint Petersburg has an average temperature range of 60° to 76° F (16° to 24° C); precipitation is insignificant during March. We will be inside a climate controlled building; it may be a good thing to bring a sweater in case the AC is not in your comfort zone.

The Visitor Center (www.weedonislandpreserve.org) has a gift shop and a small museum with displays of the Weedon Island culture (300 to 1000 AD, Manasota-Late Woodland Period in North America). These folks were not studying statistics, but harvesting fish and shellfish out of the bay. During breaks and lunch, you can wander the museum and the outdoor trails leading to Mud Hole Island and Rivera Bay. Wading seabirds are very common in the mangrove swamp, bring your camera. Kayak rentals available near the visitor center.



Immature *Nycticorax nycticorax*, Black Crested Night Heron, well camouflaged in mangroves

After hours you may wish to spend some time in downtown St. Pete. You will find a variety of restaurants, bistros, microbreweries, museums, art galleries, shops, and a series of parks that have walking, running, and bike paths along the waterfront, leading from downtown to 31st Ave N. For details, go to www.stpete.org and click on “visitors.” If you want directions, give us a shout and we will try to assist. The Dali art museum (www.thedali.org) is open Thursday evening until 8 PM.

Weedon Island is not difficult to find.

DIRECTIONS to Weedon Island Preserve, Visitors Center: 27°50′ 52.10″N, 82°36′25.26″W.

Directions from Saint Petersburg Downtown area, approximately 25 minutes’ drive time.

Take 4th street (92) north to 83rd Ave; a few traffic lights, but a more direct route than I-275. Note that 4th Street is one way (southbound) south of 5th Ave N.

At 83rd Ave N (traffic light), turn right.

1. Follow 83rd (winding road), after the road curves left and you cross a bridge (road name changes to San Martin Blvd.) turn right on Weedon Island Blvd. (sign on right). You will pass a gatehouse, beyond which there are several speed bumps and side roads to the left. The visitor center parking lot is about 2 miles beyond the gatehouse and is a left turn after passing the road to the maintenance facility. Left turn into the Visitor’s Center (VC) Parking Lot. The VC is at the far (east) end of the lot drive through the parking lot. Facing the VC, entrance is down the walkway on the right. Doors will open around 8 AM, coffee & tea available shortly thereafter.

If you are coming from Tampa, exit I 275 at 4th Street, (first exit after crossing the Howard Franklin bridge) and turn left at 83rd Ave. See bullet 1 above.

If you come across the bay on Gandy Blvd, left turn at San Martin Blvd, and left at Weedon Island Blvd, Gandy Blvd is a busy, divided road, look for the sign for Weedon Island (brown color). See bullet 1 above.

If you are coming from Clearwater or north, exit 275 at Roosevelt Blvd (686), left turn at light, go east on Roosevelt. Left turn on Gandy Blvd, followed by a quick right turn on 4th Street. Left turn at 83rd Ave N. See bullet 1 above.

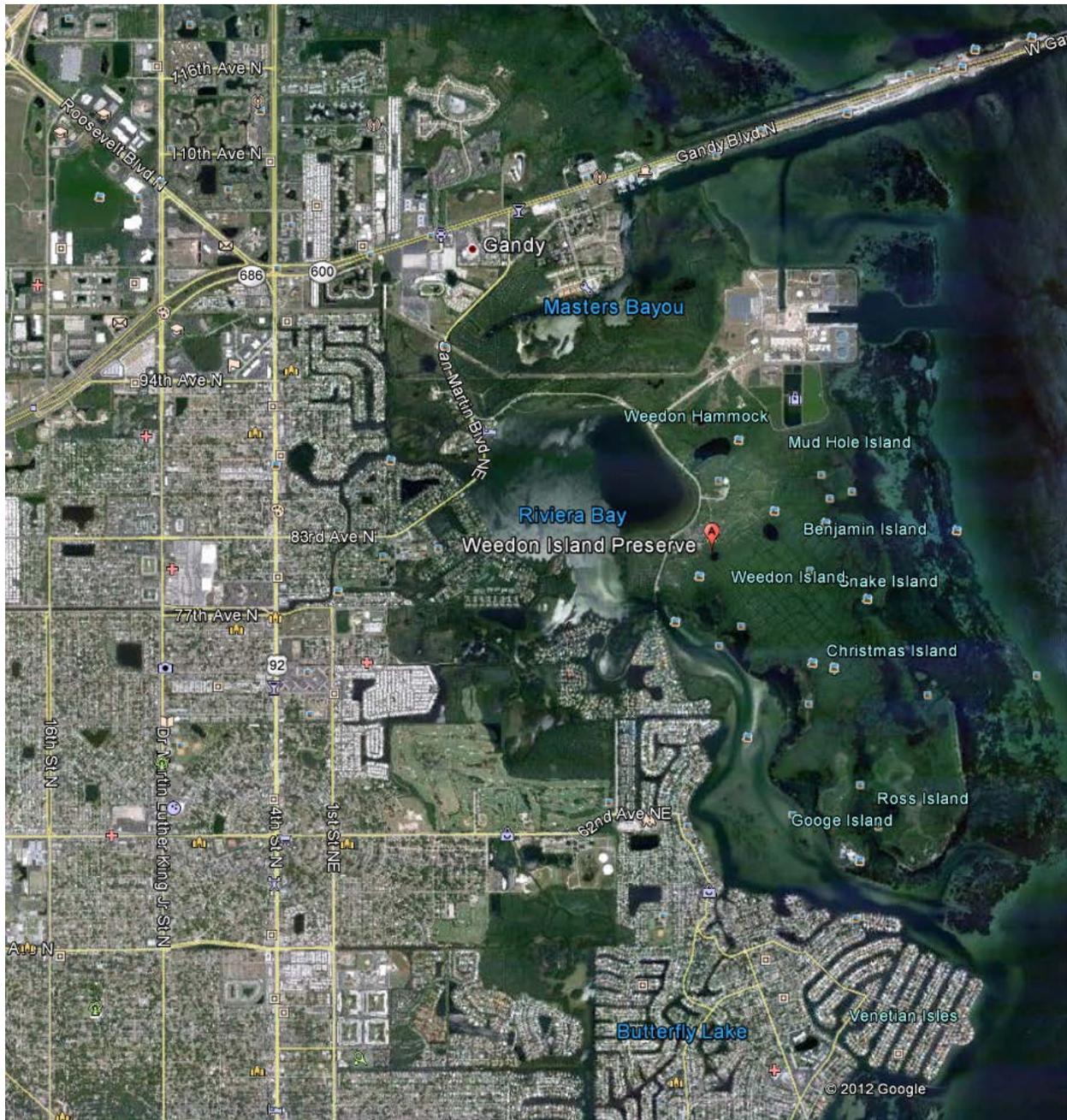
In the central core of downtown St. Pete there are multiple one-way streets. For example, if you are on Central Ave. and you want to travel north on 4th St., navigate north on 3rd St. until you reach 5th Ave N, turn left for a block, and then turn right on 4th St. Critical roads:

First Ave North, one-way west

First Ave South, one-way east

Fourth Street, one-way south, south of 5th Ave North.

Map of Weedon Island Preserve area, Red **A** is the approximate target:



We will provide coffee, tea, water, break snacks, and lunch. If you have dietary concerns (food allergies) let us know ASAP. Weedon Island Visitor Center is open to the public on Thursday through Saturday. During other days, only the outdoor facilities are open.

If you are bringing data sets to use during the workshop; the most expeditious way to move them into PRIMER is to organize the data in Excel. We attached an Excel file that you may use as a model (Oslo macrofauna, ofm.xlsx). This data set has 24 samples, from six sites, a file sheet for abundance and another sheet for biomass.

A final bit of advice, if you enjoy paddling, Weedon Island Preserve is a paddler's paradise. If you are driving in, consider bringing your canoe, kayak, or paddle board. An outfitter, Sweetwater, rents boats (727.570.4844), located where you turn into the Visitor Center parking lot. There is a marked four mile paddling trail that provides a tour through the bays and mangroves. You are guaranteed to see mullet (*Mugil cephalus*) jumping. The most common wading bird is the White Ibis (*Eudocimus albus*).

Thank you for participating!

Sincerely,

Walt & Karilyn

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