

**Relocating Rare and Endangered Plant Species
Fish Bay – Battery Gut Watershed
St. John, US Virgin Islands
June 2004**

**Trip Report Prepared by:
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On June 13/04, Kevel Lindsay and Jean-Pierre Bacle spent the day exploring the Fish Bay Watershed for the primary purpose of relocating three federally and locally listed endangered species of plants. These species include:

Erythrina eggersii (common name: Egger's cock's-spur)

Tillandsia lineatispica (common name: Pinon)

Zanthoxylum thomasianum (common name: St. Thomas prickly ash & St. Thomas bush)

We focused most our attention on the Fish Bay/Battery guts corridor system where we believed that some of these endangered species would occur. It was also the easiest access to the inner watershed environment. Our main references were the old field notes and sketched map prepared by John Matuszak in November 1982. The hand drawn information showed the approximate location and the number of plants. Unfortunately, the map was of limited use due to its scale and lack of site specific geographic references. The map did, however, provide a sense of where to initiate our search.

The exploration of Fish Bay and Battery Guts (Battery Gut being a tributary) turned out to be a most intriguing and unexpected. The Gut system had running water, with Fish Bay Gut being the main outlet. There were a series of large pools all along the gut systems (see photos below). Some pools exceeded 4 feet in depth and were 15 ft by 30 ft in size. They harbored fish, shrimp, prawns and snails. Some of the pools were also festooned with green slime algae, sometimes common in long-standing freshwater. It was obvious that the pools remained active for most of the year, which is uncommon on this small relatively dry island. We suspect that there may be a natural spring further upstream at the source of the gut.

We were successful on locating two mature *Erythrina eggersii* specimens. Both were in flowering stage, which helped in their identification. It's noteworthy that while flowering, *Erythrina* species tend to loose their leaves. Jean-Pierre Bacle spotted the first specimen along the western rock face of the Fish Bay Gut approximately a 10 minute

walk upstream from the bridge. The second stand was discovered by Kevel Lindsay further upstream in similar environment. A GPS fix was taken for both these locations;

Specimen #1 N18° 19.732' W064° 45.851'

Specimen #2 N18° 19.800' W064° 45.935'



Photo 1.0. JP Bacle downstream of pool no. 1 at Fish Bay Gut, St. John.

We were unable to locate the other two species, though we tried in vain. On our way back to St. Thomas, we met with Barry Devine and Gary Ray who were both coming back from fieldwork on Thatch Cay. We briefed Gary about our activities in Fish Bay and he informed us that he had recently located 106 specimens of *Erythrina eggersii* on a property at the edge of the watershed and the Park (see hand notes on attached map). Gary also said that we were unlikely to come across the other two species due to their rarity combined with rough terrain that severely limits access.

Gary Ray and Barry Devine would also indicate that the Fish Bay Gut system is very unique ecosystem rarely found on the island.

Barry also said that coring samples from the nearby bay indicated that sediments from the watershed have somehow been diverted via the stream directly into the bay and has completely bypassed the mangrove/salt flat downstream from the foot of the gut. This, he said, is not natural, and someone has altered the system sometime in the recent past.

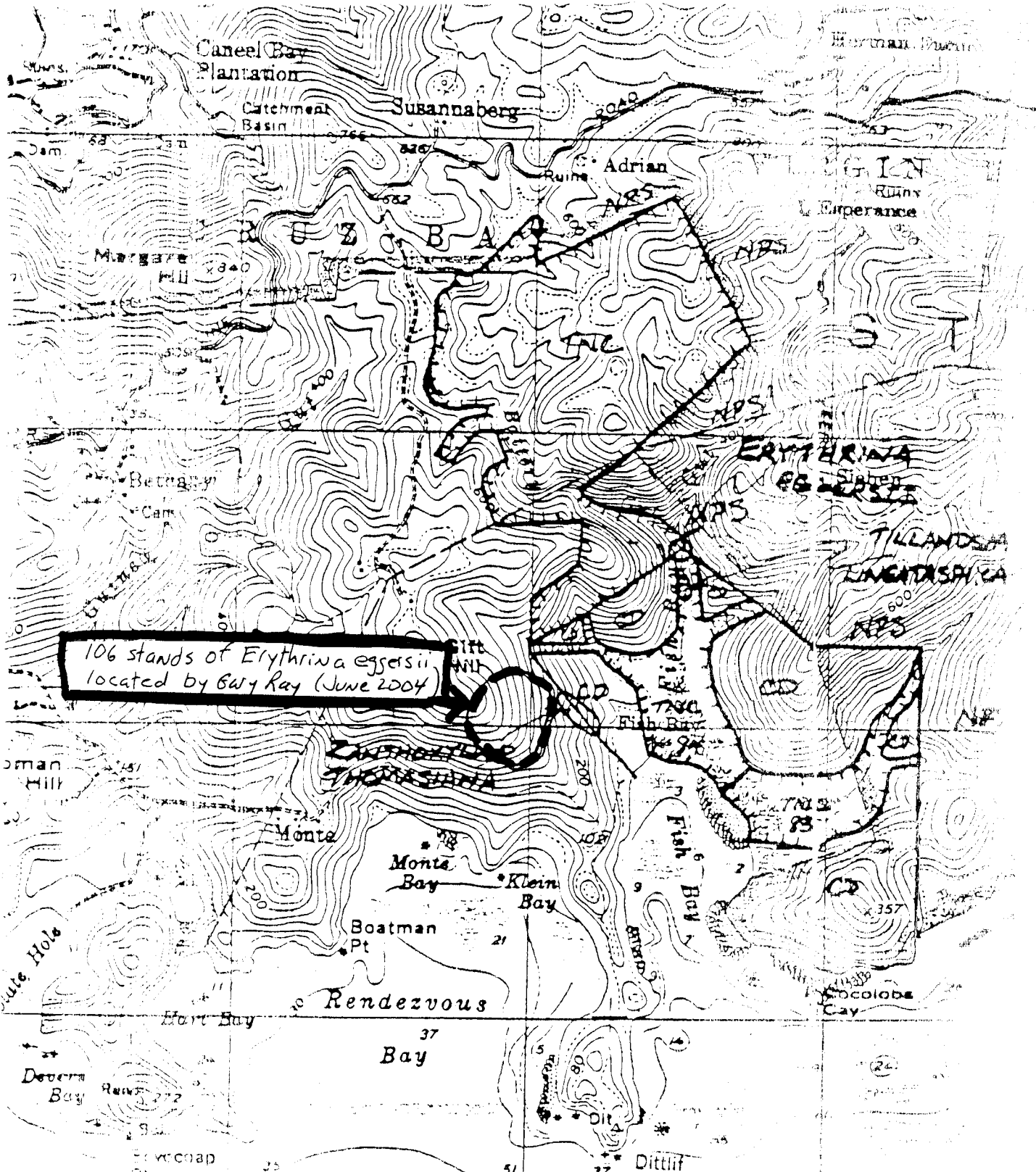


Photo 2.0. Kevel and recently acquainted friend at pool no. 2, looking upstream, Fish Bay Gut, St. John.

Future Actions

- 1) We have sent Gary Ray an email requesting further information regarding his recent findings on endangered species in the Fish Bay watershed, and if he has any GPS information. We also asked him about how best to relocate the other two species and if any other species from the Woodbury/Weaver endangered species list are likely occur in the watershed.
- 2) The Fish Bay/Battery Gut system is unique with its running water and pools. Further investigation is recommended and should include more scientific measurements. Perhaps some of this effort could be covered in Phase II of the Wetland/Riparian Inventory project.
- 3) In our next trip, we should extend our investigation to the upper reaches of the gut system in order to locate the spring(s).
- 4) Assemble all historical documents, files and local experts with regard to rare and endangered species in the Fish Bay watershed. We found some old correspondence from G. Ray dating back to March 1990 documenting his efforts to relocate these endangered species.

5) The sediment bypass issue that Barry Devine refers to should be followed up.



106 stands of *Erythrina eggersii*
located by Gary Ray (June 2004)

- TNC THE NATURE CONSERVANCY BATTERY TRAIL PRESERVATION
- TNC 83 THE NATURE CONSERVANCY 1983 ADDITION
- TNC 84 THE NATURE CONSERVANCY 1984 ADDITION
- NPS NATIONAL PARK SERVICE
- CD COCOLOBA DEVELOPMENT