

FIELD GUIDEBOOK
to
ENVIRONMENTS OF COAL FORMATION
IN
SOUTHERN FLORIDA

Trip Leaders
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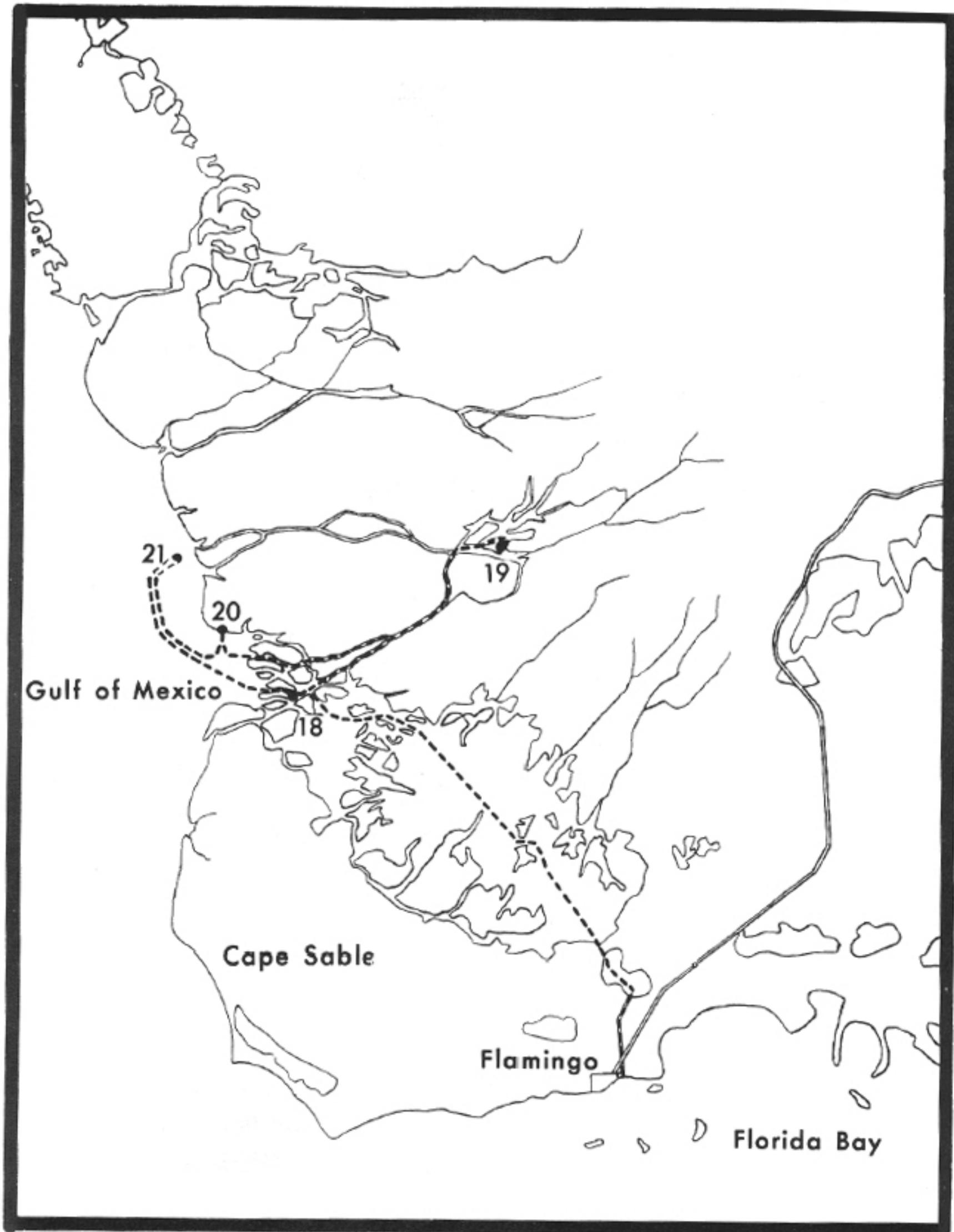
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PRE-CONVENTION FIELDTRIP
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ROUTE FOR THE THIRD DAY

(Trip Map No. 3)

Starting Point: Flamingo Marina. Board large tour boats from piers at south end of Marina.

<u>Nautical Miles</u>	<u>Description</u>
0.0 - 3.2	Follow Buttonwood Canal to Channel Marker No. 1 in Coot Bay.
3.2 - 18.8	Follow channel markers through Coot Bay, Tarpon Creek, Whitewater Bay and Cormorant Pass to Channel Marker No. 51.
18.8	Alter course to 317°.
18.8 - 20.8	Proceed 2.0 miles on 317° heading.
20.8	Alter course to 240°.
20.8 - 21.3	Proceed on 240° course to small pier on southeastern side of Jewfish Key.
21.3	<u>STOP 18:</u> JEWFISH KEY SITE. Leave tour boats and go ashore on Jewfish Key via the aforementioned pier. See pages 49 to 54 for a discussion of this site.
21.3 - 29.7	Proceed upstream following Little Shark River and the Shark River to Tarpon Bay.
29.7	Upon entering Tarpon Bay alter course to 8°.
29.7 - 30.7	Proceed on 8° heading for 1.0 mile to a point off the apex of the large deltoid island.
30.7	Alter course to 62°.
30.7 - 31.5	Proceed 0.8 mile on 62° heading.
31.5	Alter course to 136°.
31.5 - 31.9	Proceed on 136° heading for 0.2 mile to channel between deltoid island and mainland. Proceed in a southerly direction into the channel to the small pier on the



TRIP MAP NO. 3

eastern side of the deltoid island.

- 31.9 STOP 19 - TARPON BAY BULRUSH SITE. Leave tour boats via temporary pier and proceed through the mangrove fringe into the marsh environment. See pages 54-59 for a discussion of this site.
- 31.9 - 40.1 Set course at 189° and proceed into Tarpon Bay.
- 40.1 Alter course to 285°.
- 40.1 - 41.3 Proceed on 285° heading for 1.2 miles to Shark River.
- 41.3 - 50.9 Enter Shark River and follow it to its mouth in Ponce de Leon Bay.
- 50.9 Upon entering Ponce de Leon Bay, set course due west.
- 50.9 - 52.8 Proceed on 270° course for approximately 1.9 miles until your position is due south of the mouth of Graveyard Creek.
- 52.8 - 54.8 Alter course to due north and proceed around shallows and into Graveyard Creek.
- 54.8 STOP 20 - GRAVEYARD CREEK - LUNCH. Leave tour boats and go ashore via permanent pier.
- 54.8 - 55.3 Proceed 0.5 mile into Ponce de Leon Bay via Graveyard Creek channel.
- 55.3 Alter course to 310°.
- 55.3 - 58.3 Proceed 3.0 miles on a 310° heading into the open Gulf of Mexico.
- 58.3 Alter course to due north.
- 58.3 - 59.9 Proceed due north for 1.6 miles. Drop anchor.
- 59.9 STOP 21: BURIED PEAT SITE. Remain in tour boats for discussion or enter water if you choose. Do not enter water without shoes and be sure that someone has surveyed the area for sharks.

- 59.9 - 88.9 Return to Flamingo Marina via Ponce de Leon Bay, Oyster Bay, Whitewater Bay, Coot Bay and the Buttonwood Canal.
- 88.9 TERMINATION OF FIELD TRIP. Return to motel for clean up. Time of bus departure for Miami Beach to be announced.

SITES TO BE VISITED ON THIRD DAY

STOP 18: Jewfish Key Site

Objectives:

- A. Inspection of the effects of shoreline processes interacting with swamp environment processes - Sector 3: The Slough Entry Sector.
- B. Inspection of a mature red mangrove forest and red mangrove "peat" from a coastline site.
- C. Inspection of a "lime levee".
- D. Discussion of the mangrove forest swamp and the habits of the red mangrove.
- E. Discussion of the chemistry and palynology of the mangrove forest swamp.

Discussion:

This is a unique area. At no other place in the world are red, black, and white mangroves known to achieve the heights that they did in this locality. Unfortunately, but perhaps, normally, the hurricanes of the last few years (particularly Donna in 1961) have smashed into this area taking most of the big trees down. The red mangrove is generally pictured as a shrubby, much-branched tree growing to perhaps 25 feet in height. Here the red mangrove is a straight boled, little-branched tree 50 - 75 feet or more in height.

Figure 37 shows the extensive island system that is coincident with entry of the Shark River Slough into the Gulf of Mexico. This Slough is