

3 willet, 8 sandpiper, 3 ruddy turnstone, 13 knot, 6 laughing gull, 2 royal tern, 3 black skimmers flew by 200' out from shore, 3 Louisiana heron flew by off shore 100', 1 Forrester's tern, 1 common tern.

Photos taken this morning (2/10 mi SW of entry of road onto beach.

Photo 830424-1 Annette in her new bonnet.

" " - 2 Annette (from head to foot)

" " - 3 dunes & blue flowers.

" " - 4 Barth and waters of Gulf of Mexico

" " - 5 Barth and Gulf of Mexico, our camp site

" " - 6 Landward moving dune & yellow sunflower.

" " - 10 Barth from sand dunes and gulf in distance ^{grass foreground}

- 11 Geomys mounds, new in sand.

- 12 dunes with yellow flowers.

- 13 dunes, yellow flowers and Annette

- 14 Annette from top of dunes.

- 15 " " " " "

- 16 " " " " "

- 17 " " " " "

(18c) Photo 830424-18 Barth from beach showing Annette and new awning ^{photos on beach}
 Left west camping area. ^{of students on beach at bath house. Turtle refuge.} Drove to Grasslands Nature Trail. ^{beyond}

Photo 830424-19 of wind emnivity on sandy ridge. This trail is controlled by Padre Island National Seashore. This area is grasslands with low flat area of periodic inundation from heavy rains but now in grassland. The vegetation belies the fragile nature of the environment. Some erosion starts by wind channels exposing roots and allowing wind to carry away the soil, sometimes to the expense of the entire as represented in the above picture. *Crotalus atrox* and *Sceloporus catenatus texgerminus* in area. There is no topsoil but only wind blown sand stabilized by vegetation. Prevailing winds are SE. The bright green foliage is *Baptisia leucophaca*. These produce the tumbleweed like stems and are about as coarse as Tumbleweed. It has now a yellow flower just beginning to blossom. The yellow flower of *Cassia fasciculata* in fall. The sea oats (*Uniola paniculata*) forms on dune areas, some 6' tall and is one of the major stabilizing plants. Reproduction by rhizomes. The lizard *Holbrookia propinqua* in area (keeled earless) The spotted ground squirrel (*Citellus spilosoma*) was heard but not seen. Tracks common. The Kingman Rat (*Dipodomys ordii*)