

No 02

Perrine Wayside Park

(v. 1.1, 7-06)

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Location and access

The park is located on the east side of US 1 (S. Dixie Highway) at roughly SW 164th St, north of where US1 divides.

What there is to see

Miami oolite and its sedimentary structures, including the post-depositional modification by burrowing organisms. A closed karst depression, now filled with water.

Background

The oolitic facies of the Miami Formation is exposed in a small bluff on the south side of the roughly circular pond



Fig. 1 Looking toward the SE across the pond to the bluffs on the SE side

Rock type(s)

The rock is a white to cream-colored rock composed mainly of spherical grains and shell fragments. It effervesces when acid is applied, indicating that the grains are composed of calcite (calcium carbonate – CaCO_3), and therefore the rock is a limestone. This particular type of limestone, composed of grains

cemented together, is referred to by sedimentologists as a *grainstone*. The majority of fragments are nearly spherical sand grains called *oooids*. A grainstone composed predominantly of ooids is termed an *oolite*. Microscopic examination shows that these sand grains are made up of concentric layers around a small central nucleus of either shell fragments or small quartz grains.

Fossil studies and uranium-lead dating indicated that the limestones of the Miami Formation were produced in the Pleistocene epoch, about 125,000 years ago – very young by geological standards.

Mapping of the oolite shows that it makes up a continuous *oolite bank* that forms the Atlantic Coastal Ridge which is in the eastern parts of Miami-Dade and the southern part of Broward county.