***Pliocene/ Pleistocene Conus spp. from Southern Florida and Africa?***

**Mozambique malacologists allege that it is possible to establish a link between each morph and the geographical location where it was captured. Our question is, can this hold true over geologic time spans since the Pliocene 5.3 to 1.8 mya. In north Mozambique, the Pemba form and the Nacala form, can be distinguished which contradicts the old belief of a sole form in the entire region. Further entropy arises when taking into consideration the high number of species described as distinct by some authors but acknowledged as synonymous species by others. To unravel this complexity, a phylogenetic study was conducted with a small number of specimens captured along the Mozambican coast: Pemba form, Nacala form, *C. p. bazarutensis*, *C. lohri* and *C. praelatus*. The results were surprising, not only for the weak distinction between the assessed synonymous species and the forms of this complex but also for the clusters obtained, of which some are more geographic-related (Pereira et al, 2010). These results suggested that not every morphological description used to distinguish the species is genetically supported, therefore revealing the importance of conciliating as much information as possible when classifying the species.**

**The Pliocene/Pleistocene Florida species below form the nucleus of an on-going study of  *fossil* cone spp. from Southern Florida in an attempt to identify those species that are synonymous with their living counterparts and/or those that have been separated from their synonymous spp. since the break-up of Pangea ca. 200 mya when southern Florida and west Africa between Guinea Bissau and Sierra Leone were parted.**

**Reference: Pereira, C. M., Rosado, J., Seabra, S. G., Pina ­Martins, F., Paulo, O. S. and Fonseca, P. J. (2010) “*Conus pennaceus*: a phylogenetic analysis of the Mozambican molluscan complex,” *African Journal of Marine Science*, 32: 3, 591-599.** [***http://www. nisc.co.za***](http://www.nisc.co.za/)

1. CALUSACONUS MANUELI (PETUCH & DROLSHAGEN ca. 2000).

Newly described spp. Rare. Spp. has 3 forms. Nearly Perfect aperture.

TAMIAMI FORMATION, PINECREST MEMBER**, Pliocene.**

Collected 1973. **AMPAC Quarry south of Sarasota, Florida,** closed.

2. DAUCICONUS AMPHIURGUS (DALL 1889).

BERMONT FORMATION, HOLEY LAND MEMBER**, Pliocene.**

Collected 1966. **AMPAC Quarry south of Sarasota, Florida,** closed.

3. GRADICONUS (LEPTOCONUS) PARKERI (RICHARDS & HARBISON 1947).

Spp. has 3 forms, long body form. Minor aperture chipping

CALOOSAHATCHEE FORMATION, FT. DENAUD MEMBER**, Pliocene**.

Collected 1973. **AMPAC Quarry south of Sarasota, Florida,** closed.

4. JASPIDICONUS PFLEUGERI (PETUCH 2004).

THOMPSON FORMATION, OKALOACOOCHEE MEMBER**, Pliocene.**

Collected 1968. **AMPAC Quarry south of Sarasota, Florida,** closed.

5. KOHNICONUS PRESOZONI (OLSSON & PETIT 1964)

TAMIAMI FORMATION, FRUITVILLE MEMBER**, Pliocene**.

Collected 1969. **AMPAC Quarry south of Sarasota, Florida,** closed.

6. MAGELLICONUS HARBISONAE (PETUCH 1994).

Very glossy specimen, perfect aperture.

CALOOSAHATCHEE FORMATION, FT. DENAUD MEMBER**, Pliocene.**

Collected 1973. **AMPAC Quarry south of Sarasota, Florida,** closed.

**7.** **PERPLEXICONUS ALLIGATOR (Petuch & Mardie Drolshagen 2011)**

Newly described spp., named for its alligator-like skin texture. Rare. Perfect aperture.

TAMIAMI FORMATION, FRUITVILLE MEMBER**, Pliocene**.

**Sarasota, Florida.**

8. SEMINOLECONUS DIEGELAE (PETUCH 1994).

Newly described spp. Rare. Perfect aperture.

CALOOSAHATCHEE FORMATION, FT. DENAUD MEMBER**, Pliocene.**

Collected 1972. **AMPAC Quarry south of Sarasota, Florida,** closed.

9. SEMINOLECONUS TRIPPAE (PETUCH 1991).

Newly described spp. Rare. Minor aperture chipping, short body form, glossy.

TAMIAMI FORMATION, FRUITVILLE MEMBER**, Pliocene.**

Collected 1971. **AMPAC Quarry south of Sarasota, Florida,** closed.

**spuriconus yaquensis. Two forms, rounded shoulder**

**Pinecrest beds-above Unit 7a, Pliocene/Pleistocene.**

Spiral rows of spots and the rounded shoulderresembles mature living *C. lindae***.**

Collected 1972. **AMPAC Quarry south of Sarasota, Florida,** closed.

**spuriconus yaquensis. Two forms, angular shoulder.**

Spiral rows of spots and the angular shoulderresembles immature living *C. lindae***.**

**Pinecrest beds-above Unit 7a, Pliocene/Pleistocene.**

Collected 1972. On roadside near **AMPAC Quarry south of Sarasota, Florida**.

# Conus Jaspideus

CONUS JASPIDEUS STEARNSI RARE, PLIOCENE HENDRY COUNTY, FLORIDA