## SMITHSONIAN MISCELLANEOUS COLLECTIONS VOLUME 98, NUMBER 1

## TWO REMARKABLE NEW SPECIES OF MARINE SHELLS FROM FLORIDA

(WITH ONE PLATE)

#### BY PAUL BARTSCH

Curator, Division of Mollusks and Cenozoic Invertebrates, U. S. National Museum -





(Publication 3524)

GITY OF WASHINGTON
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#### TWO REMARKABLE NEW SPECIES OF MARINE SHELLS FROM FLORIDA

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There were recently brought to the attention of the United States National Museum, among other specimens, two remarkable new species of marine mollusks collected near Tarpon Springs, Fla., by Sozon Vatikiotis, a deep-sea diver. The types of these species were presented to the Museum by Mrs. Helen Vatikiotis, wife of their discoverer.

#### CONUS SOZONI, n. sp.

Plate I, figs. I-3

Shell large and rather strong with the spire broadly conic and about one-fourth the height of the total height of the shell. The succeeding turns fall very slightly below the shoulder of the whorls and produce a feeble steplike effect on the spire. The exposed portion of the turns on the spire slopes gently and is marked by very fine obscure wrinklelike spiral lirations and protractively curved incremental lines. From the shoulder to the tip of the base the shell is almost straight, having a slight bulge a little below the middle, and a broad feeble contraction anterior and posterior to this, which really renders the outline of the whorl slightly sinuous. The sculpture of this part of the shell consists of incremental lines of varying strength and microscopic spiral lirations, except on the basal half of the columella, which is marked by a dozen rather deep grooves that are distantly spaced posteriorly and more closely approximated anteriorly. Anteriorly they are separated by raised spiral ridges about as wide as the grooves, while posteriorly the space between the grooves becomes much wider, the last one being about five times as wide as the groove. Aperture normal, that is, we have the inner and outer lip practically parallel with a deep sinus at the posterior angle and a channel anteriorly. The color pattern of this cone is strikingly beautiful. The spire has a vellowish orange base with stretches of flesh color as a background.

It is axially marked by retractively curved brown streaks, which may be straight, curved, or zigzag. Anterior to the shoulder there is a broad band of ochraceous buff. This band covers about one-fifth of the distance between the shoulder and the tip of the columella anterior to the shoulder. It is separated by a moderately broad white zone from another broad band of the same color and width as that at the shoulder, which in turn is followed by a band about two-thirds as wide as the last mentioned of flesh color. The rest of the side grades from a little lighter than the two dark bands just mentioned to flesh color with an ochraceous flush. In addition to these major spiral dispositions of color the shell is marked by interrupted spiral bands of dark chestnut brown. The elements composing these vary considerably in size, and are best visualized by consulting our figure. Those covering the dark band immediately below the shoulder are heavier and are continuous with the dark axial zones on the spire and are almost confluent axially. The interior of the aperture is flesh-colored with a decidedly pinkish tinge, the dark pinkish flush coinciding with the darker bands.

The type, U.S.N.M. no. 472849, has 13 whorls and measures: Length, 100 mm; greater diameter, 47.5 mm. It was collected on a reef at Tarpon Springs, Fla. A paratype is in the collection of Mrs. Helen Vatikiotis. It is named for Mr. Vatikiotis, its discoverer.

#### FUSINUS HELENAE, n. sp.

Plate 1, figs. 4-5

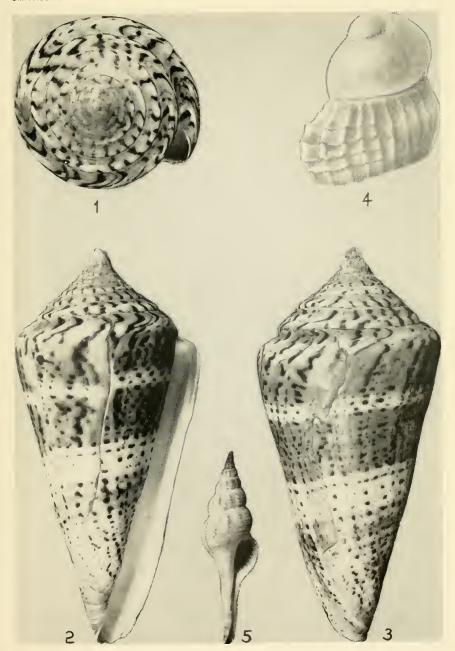
Shell moderately large, fusiform, with the basal portion of the shell only a bit shorter than the length of the spire. The tip and early postnuclear whorls are pale chestnut brown, the rest of the shell is flesh-colored with the axial ribs rust-stained. The base and columellar portion also have rusty staining. Nuclear whorls a little more than 2. the first 1.5 turns smooth, inflated, strongly rounded, the succeeding part marked by almost vertical axial ribs. The early postnuclear whorls are marked by strong, low, broad axial ribs which are separated by equally impressed spaces of about the same width. Of these ribs, about 10 occur upon each of the first 5 turns, after which they become less conspicuous and less regular and quite inconspicuous on the last whorl. In addition to these, the whorls are marked by spiral cords, of which 5 are present on the first 3 postnuclear turns, after which they increase by intercalation, 25 varying in strength from mere threads to rather strong keels being present between summit and periphery on the last turn. Base short, strongly rounded. Columella

very long and spindle-shaped, somewhat sinuous and marked by incremental lines and rather weak spiral threads. Aperture narrowly oval in its major portion with a long, sinuous canal basally, the posterior angle is acute, outer lip thin, rendered slightly denticulated by the axial threads; inner lip thin and appressed to the columella.

This type, U.S.N.M. no. 472850, has 9.6 whorls and measures: Length, 50.4 mm; greater diameter, 14.7 mm.

I take pleasure in naming this for Mrs. Helen Vatikiotis.





1-3. Conus sozoni. 4, 5, Fusinus helenae. All figures are natural size except 4, which is much enlarged to show the character of the tip.