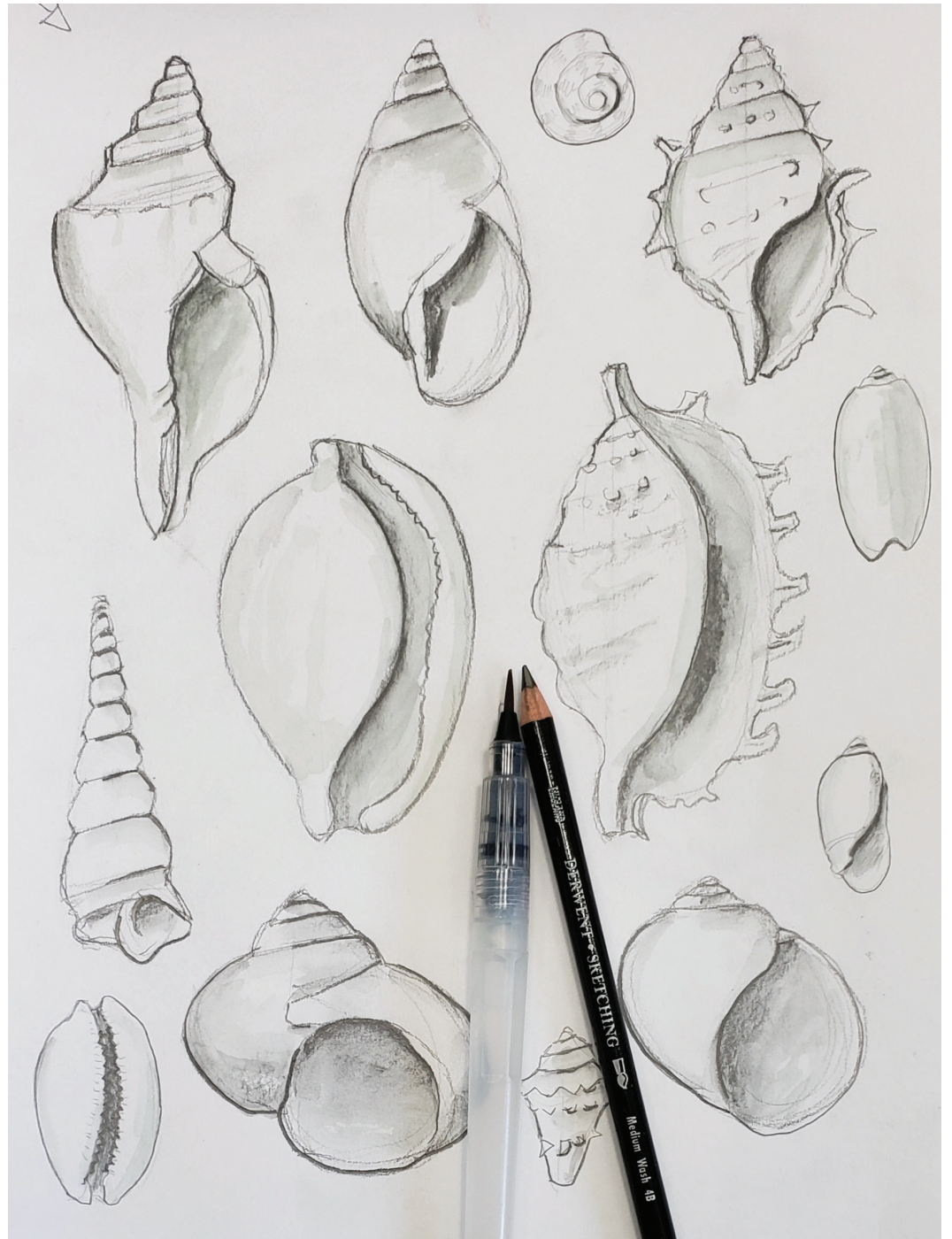


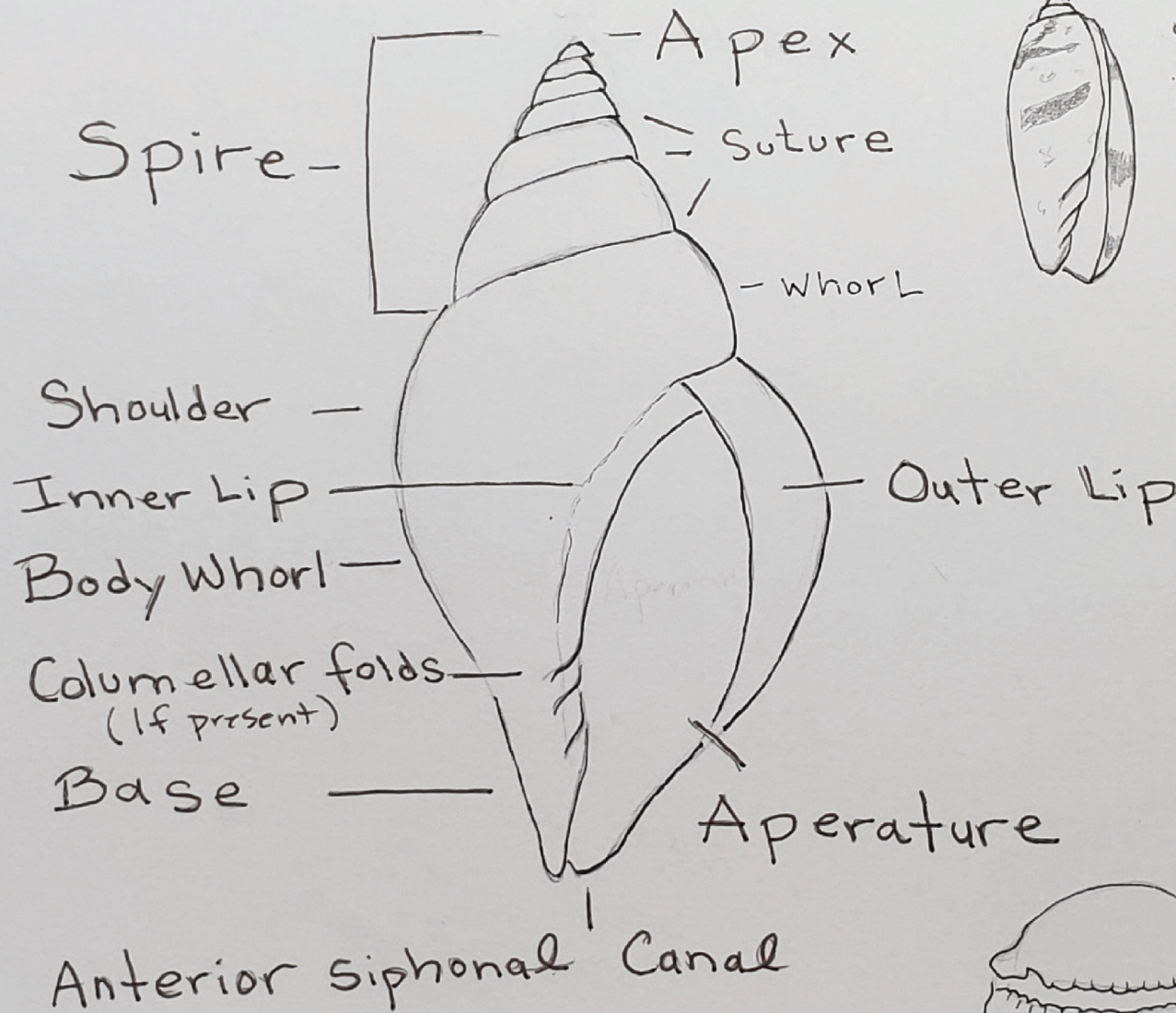
Seashell Identification Guide

Based on field
sketches by
Christine Elder

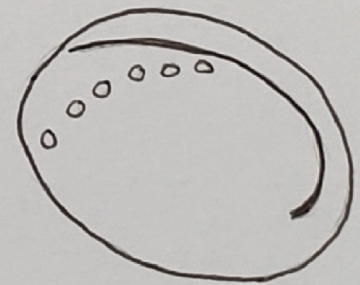


PARTS of a SEASHELL

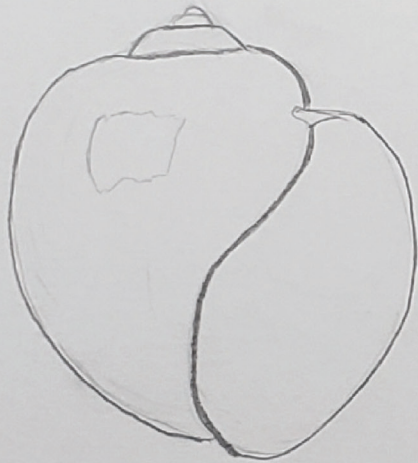
SHELL SURFACES



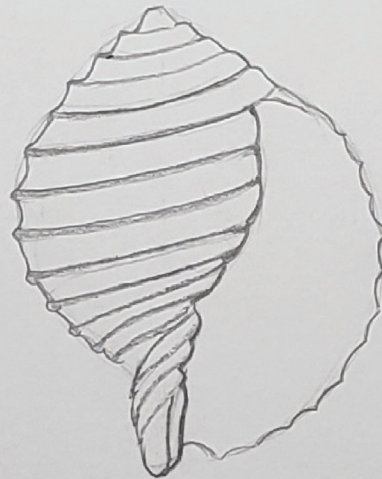
- Shiny
- Patterned
- Matte
- Rough
- Smooth
- Ribbed
- Spiny
- Holes



Types of Surface Sculpture on Seashells



Smooth and
Shiny or Matte



Spiral
Sculpture



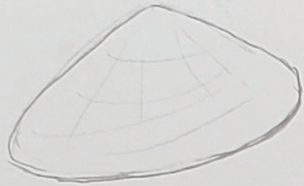
Axial
Sculpture



— Reticulate sculpture

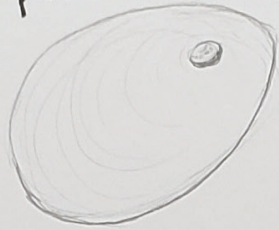
Limpets + KEYHOLE LIMPETS

Acaedidae



- Conical shell without hole

Fissurellidae



- Hole or slit at top

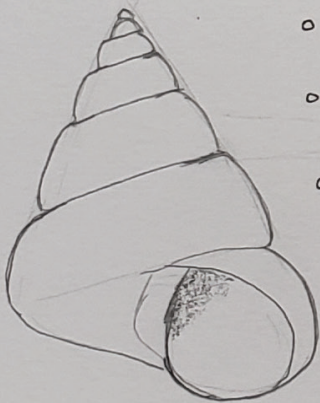
- Both families have broad, strong foot for holding on to rocks in tidal zones
- Herbivores, nocturnal · up to 4"
- Large, global families

ABALONES: Haliotidae



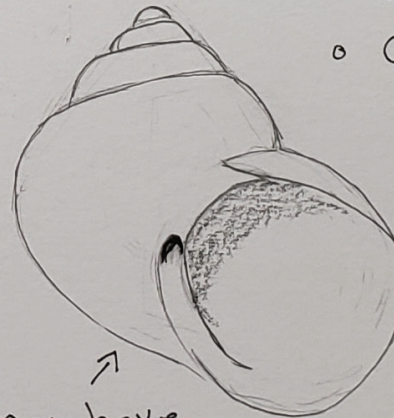
- Low spire of few whorls
- Row of holes in shell
- Large muscular foot · up to 12"
- Collected for jewelry + delicacy
- Global family of 100+ species

TOP SHELLS: Trochidae



- Conical, spiral shell
- Smooth, glossy or sculptured
- Pearly interior
- Herbivores
- Large, global family
- up to 4"

TURBANS: Turbinidae



- Turban shaped
- Circular aperture pearly inside
- Herbivores
- up to 12"
- Rocky, sandy habitat
- Include edible Tegulas
- may have hole at base of columella (Umbilicus)

PERIWINKLES: Littorinidae

- Small shells to 2"
- Smooth or sculpted
- Tide pools
- Graze above water line
- may be very numerous
- Large, global family



TURRET / SCREW SHELLS

Turritellidae

- Many whorled to 5"
- Spirally coiled
- Circular aperture
- Burrows in sand + mud
- Large, global family



CERITHS: Cerithiidae

- Many whorled
- Various sculptured
- Sandy rubble habitat
- Herbivores
- Large, global family
- up to 16"
- Siphonal canal present



WENTLE TRAPS: Epitoniidae

- white shells
- Axial sculpture
- Round aperture
- up to 4"
- Predators on sea anemones + corals
- Global, large family



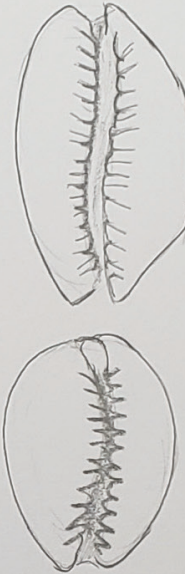
WINGED / TRUE CONCHS

Strombidae



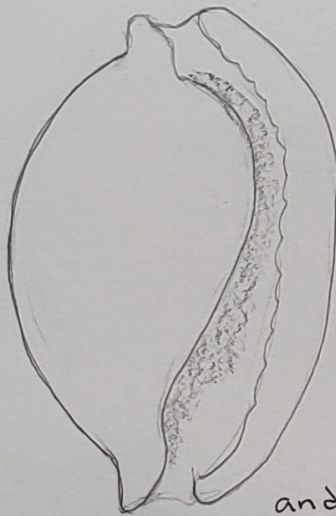
- Used for food + decoration
- Large, heavy shells +12"
- Global, tropical
- Expanded Lip
- Herbivorous in sandy marine grass habitats
- Uses operculum to hop on sea floor!
- Strombodal notch where right eye stalk protrudes

COWRIES : Cyraeidae



- Used for jewelry + currency!
- Long, narrow aperture with toothed lips
- Elongate to cylindrical
- Shiny, to 6"
- Color patterns
- Nocturnal herbivores
- Global in warm waters
- Large family, herbivores

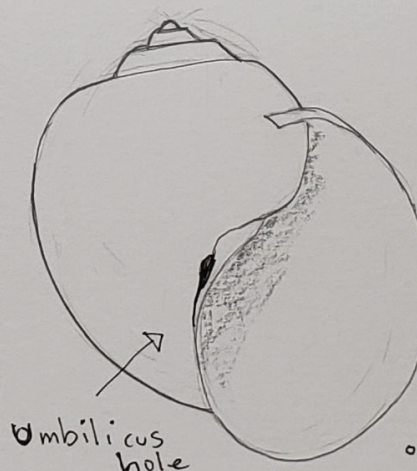
EGG SHELLS : Ovulidae



- Egg size + shape, 5"
- Ends elongated like a spindle
- Smooth + shiny
- Eats sea fan + other corals
- White to buff
- Related to cowries

and like them, have colorful living mantle covering shell

MOON SHELLS : Naticidae



- Large, global family
- Rounded
- Short spire
- Smooth
- Aperture wide
- Large, muscular foot for burrowing
- Predatory boring into clams!
- Egg capsule "sand collar"

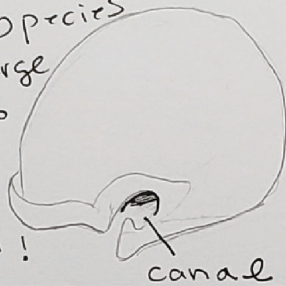
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HELMET SHELLS: Cassidae

- Named for helmet brim along edge
- Short spire
- Large body whorl
- Eat sea urchins and sand dollars



- Some species heavy, large shell up to 19"!



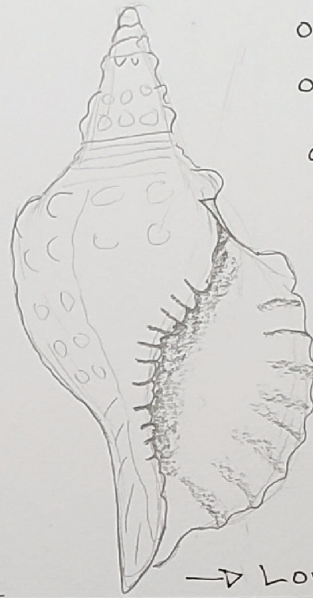
Canal
→

Scotch Bonnet is state seashell!

TRITON SHELLS

◦ Used as trumpets since ancient times, like Triton the Greek sea god.

- World wide, warm waters
- Large + Stout to 18"
- Strongly sculptured
- Aperture with folds along both lips
- Carnivorous - they anesthetize prey before inserting proboscis into prey



→ Long siphonal canal

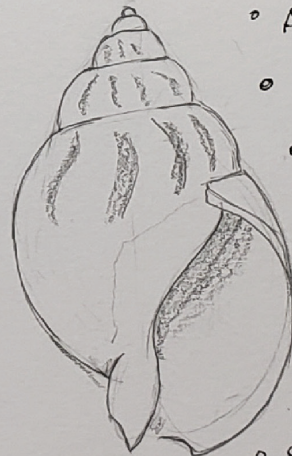
MUREX SHELLS: Muricidae



- Source of "Royal Purple"
- Long spines or ribs
- Long siphonal canal
- Large, global. Up to 10"
- Predators on other snails + invertebrates by boring hole!

◦ Prized since ancient times as fabric dye from anal gland!

WHELKS : Buccinidae

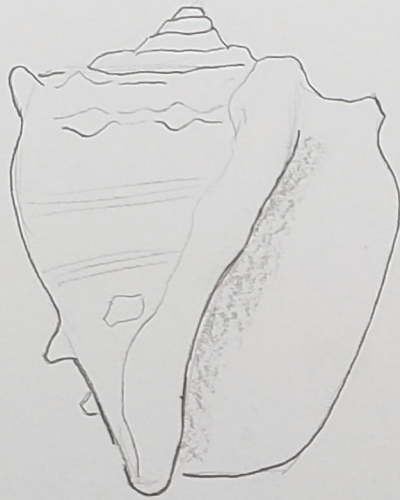


- A very large, global family
- Tide pools to 15,000' feet!
- + 1,500 species, up to 8"
- widely variable in shape + form but all possess a well-defined canal

◦ snail is active predator with a long proboscis.

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CROWN CONCHS: Melongenidae



- Large beefy shells up to 23"
- Low spire
- Large body whorl
- Aperture elongate
- Siphonal canal
- Small family in temperate and tropical seas

SPINDLE SHELLS: Fasciolaridae



- Named for spindle shape
- Shells up to 19"
- Elongate spire
- Long siphonal canal
- Columella may be smooth (like this one) or with spiral folds.
- Medium-sized family in temperate + tropical seas.
- Carnivore on other snails

CHANKS : Turbinellidae



- Beefy, large up to 14"
- Long siphonal canal
- 2-3 spiral ridges on the columella
- Small family in subtropical to tropical seas
- Carnivorous

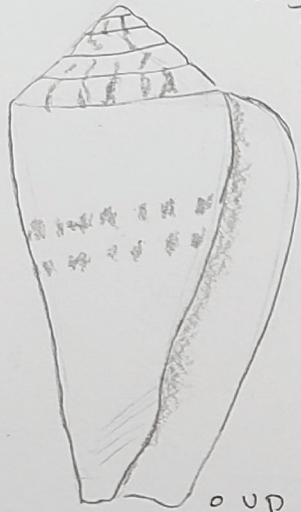
VOLUTES : Volutidae



- Large, global family
- Medium to 18"
- Elongate
- Smooth or with some spines + knobs on upper body
- 1 to many spiral ridges on the columella

CONES : Conidae

- Large family in tropical seas
- Named for ice cream cone shape!



- Short spire
- Narrow aperture
- Smooth or with some spines or knobs
- Often colored and variously patterned

◦ up to 8" ◦ Venomous!
(be ware)

TURRIDS : Turridae

- Largest family of molluscs with 1500 species
- World wide, all depths
- Smallest to 5"
- Long spire
- Sculptured with axial, spiral or reticulate patterns
- Siphonal canal may be short or long



OLIVES : Olividae

- Large family in warm seas
- Elongate shell
- Short spire
- Long, narrow aperture
- Medium sized to 5"



◦ 1" Dwarf Olive

✱ Some species like this "lettered olive" have ridges along inner lip

TUNNS : Tonniidae

- Small family in tropical seas
- Oval shell to 11"
- Thin shell
- Large body whorl
- Large aperture



◦ Strong spiral sculpture
◦ Bury in sand ◦ Dine on sea cucumbers!

4/2023 G