

Oceans Animal Facts

COMMON/SCIENTIFIC NAME: Green Serpent Star, Green Brittle Star (*Ophiarachna incrassata*)

TERMS: *Male-Male Female-Female Young-Juveniles*

DISTRIBUTION: Found in the Indo-Pacific Ocean, from Sri Lanka to Hawaii.

HABITAT: The Green Brittle Star inhabits reef areas and is generally found in crevices, caves and under rocks.



DIET: *Wild* – Green Brittle Stars are not picky eaters. They are carnivorous scavengers and feed upon pieces of meaty substances, small crustaceans and organic matter/detritus (waste products). The brittle star's arms move the larger food masses to the mouth and tube feet move smaller particles to the mouth. This animal's mouth is on the underside (oral side) of the central disk.

Zoo – Scavenger of uneaten food, chopped shrimp and other meaty pieces

PHYSICAL DESCRIPTION: The Green Brittle Star is characterized by radial symmetry with a central disk from which five snakelike arms protrude. The arms are highly flexible. **Brittle star** is the common name for echinoderms belonging to the class Ophiuroidea. The name is derived from their habit of breaking off arms as a means of defense. New arms are easily regenerated. They are also called **serpent stars** because of the snakelike movements of the five mobile, slender arms. Brittle stars resemble the more familiar sea stars (see Chocolate Chip Sea Star animal fact sheet). They are different, however, both behaviorally and anatomically. A sea star walks on hundreds of tube feet, its arms held more or less rigid. A brittle star or serpent star walks on its arms moving its long delicate spiny arms in a swimming or serpentine motion. Its tube feet are reduced; their function is primarily sensory. Brittle stars have longer arms than sea stars. Another important difference is the attachment of the arms. The arms of a sea star are not differentiated from the disk; they merge imperceptibly with it. The arms of a brittle star project from the well-defined margin of the central disk; the origin of each arm can be seen clearly. Each brittle star arm contains a series of jointed, bonelike internal calcite plates, or ossicles, which determine the freedom of arm movements. The body and arms of brittle stars are also protected by calcite plates. Brittle stars can move quickly and in any direction. The Green Brittle Star is nocturnal and likes to spend the day hiding in rocks. Often, they will keep their body buried while extending out their arms to sense for food. During the night they will come out of the rocks and crevices to search for food.

Coloration: Hunter green with short yellow and black bristles (spines) along their green arms. The central disk is green and is decorated with whitish/yellowish and black markings.

Size: Can reach lengths of 22 inches arm-tip to arm-tip. Central disk at maturity is approximately 2 inches.

REPRODUCTION/GESTATION: Sexes are separate (dioecious) and there is no sexual dimorphism (both sexes look alike). Young are carried in brood pouches and are released as partially developed juveniles.

LONGEVITY: Insufficient data.

ECOLOGY & CONSERVATION: *Status in the wild* – The Green Brittle Star is not listed in the IUCN Red List as endangered or threatened at this time.

GENERAL INFORMATION:

- Hobby aquarists often acquire Green Brittle Stars to help keep their aquarium clean as these animals are ravenous scavengers and control excess waste in aquariums.

SOURCES:

1. <http://www.wetwebmedia.com/brittlestaridfaqs.htm>
2. <http://www.saltcorner.com/sections/zoo/inverts/echinoderms/brittlestars/Oincrassata.htm>
3. <http://www.petsolutions.com/Green+Brittle+Star-I-175200L-I-.aspx>
4. <http://www.saltwaterfish.com/m-inverts/Green-Brittle-Star.html>
5. <http://www.encyclopedia.com/html/b1/brittles.asp>
6. <http://www.ucmp.berkeley.edu/echinodermata/ophiuroida.html>
7. http://saltaquarium.about.com/cs/starfishcare/1/blstarfam_ophiu.htm
8. Kaplan, K.H. 1982. *A field guide to coral reefs*. Boston: Houghton Mifflin Company.
9. <http://www.petsolutions.com/articles/175200.html>

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