

Mass spawning of *Holothuria fuscopunctata* in New Caledonia

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Species: *Holothuria fuscopunctata*.

Location: Tabou Reef, southwest lagoon; GPS point (WGS84): 22°28'56.35 S, 166°26'43.97 E

Date and time: 24 November 2013, 2 p.m. local time.

Moon phase: full + 7 (waning gibbous).

Observer/Photographer: Emmanuel Tessier and Philippe Letouze (Fig. 1).

Observation zone in Tabou Reef (black box).

During the nights of 16–17 and 23–24 November 2013, a mass spawning of coral and black-and-white snapper (*Macolor niger*) in spawning groups was observed in Boulari Pass and in the lagoon.

On 24 November, while scuba diving during the daytime in the western part of Tabou Reef, about 100 specimens of *Holothuria fuscopunctata* were observed releasing gametes. On the trip out at 1:30 p.m., the specimens were positioned normally on the sediment (coral sand). On the return trip at 2:00 p.m., all specimens were beginning to rise up and sway back and forth. They were in groups of two to three, about 4–5 m apart.

The spawn was released from the gonad opening located on the anterodorsal portion of the body. In each group two types of spawn were released:

- Some specimens released white filaments (that looked like poached egg whites) that dissolved fairly readily in the salt water. These were probably the males.
- Others released clouds of transparent liquid that made the sea water murky and in which you could see tiny black dots that seemed to be independent (no connective tissue). This was interpreted as eggs released by the females.

Of the four groups observed more closely, sperm was systematically released before the first eggs were, as is the case in most spawning observations.

The observations lasted about 10 minutes. At the end of the observation period, the specimens were still upright and continued to release gametes.



Figure 1: *Holothuria fuscopunctata* in spawning position.