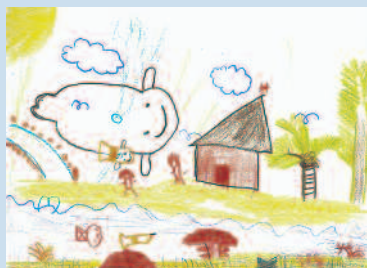


## What is the reef in the eyes of the children of New Caledonia?

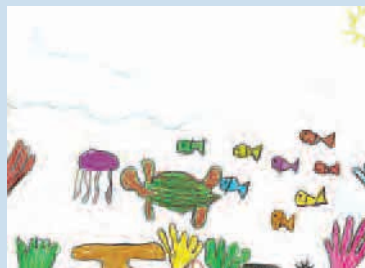
Jocelyne Ferraris, Georgeta Stoica, Catherine Sabinot, Pascale Chabanet,  
Stéphanie M. Carrière, Claire Levacher and Marlène Dégremont



Influence of the socio-cultural and environmental context on the perception of coral reefs (after using the MARECO case).

A: Yaté, "Wadiana waterfall". © J.-B. Agourere

B: Nouméa, "The coral reef". © M. Meray



Drawings before (left) and after (right) the use of the MARECO case, "The reef in our hands", by Marie-Louise, eight years old, Isidore Noell school. © M. L. Xowi

In 2016, about 80 children from five primary schools in Nouméa (Boyer, Isidore Noell), the east coast (Thio and Yaté) and the mountain chain (Coula) participated in an interdisciplinary research program on the perception of coral reefs. This program was led by a team of natural and social science researchers. Its aims were to assess the knowledge, practices and perceptions related to coral reefs in children aged between six and eight years old and to develop a method to evaluate the impact of an awareness campaign on reef vulnerability in four French regions (New Caledonia, Mayotte, Reunion Island and Pyrénées-Orientales).

### Exploring the coral reef ecosystem is fun!

Coral reef drawings were collected before and after the use of a "The reef in our hands" kit containing three educational games whose objective was to communicate scientific concepts on biodiversity, disturbances, uses and management methods of the coral reef ecosystem. A total of 1,300 drawings and interviews conducted in the field, were analyzed using a grid listing and coding of the depicted elements, in order to compare the coral reef perceptions of the 20 primary school classes involved in the program.

### When science meets education

The analysis reveals a great diversity of perceptions among children according to socio-cultural profiles, but also between urban, rural and coastal environments. This emphasizes that relationships with nature or the environment vary from one school to another, depending on direct and indirect experiences of the reef. Using the MARECO case results in an improved understanding of reef biodiversity. The immersion of scientists in the school environment also improves understandings of academic and empirical knowledge and their plasticity in different contexts, as well as how they are transferred, in order to maintain, disseminate and improve them.

# New Caledonia World of corals

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### **Cover illustrations**

Cover page 1 (from top to bottom):

Bay of Upi, Isle of Pines. © P.-A. Pantz

Coral biodiversity of Larégnère reef. © IRD/S. Andréfouët

Cover page 4 (from left to right):

Loading of a mikwaa net on a decked pirogue at Pwadèwia, St. Joseph Bay,  
Isle of Pines, 2017. © M. Juncker

Clown fish eggs. © G. Boussarie

Incubation of coral colonies in benthic chambers. © CNRS/E. Amice

Flying Red-footed booby (*Sula sula*). © M. Juncker

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