

OF ABC Islands

There are more kinds of mollies than you may have originally thought.

he "ABC" in ABC islands is an abbreviation for Aruba, Bonaire and Curacao (which are part of the Kingdom of the Netherlands). These islands are located not far off the northwestern coast of Venezuela. Rosen and Bailey mention in their comprehensive revision of livebearing toothcarps in 1963 that there are three species native to the islands: the molly (*Poecilia sphenops*), (one-spot molly) *P. vivipara* and guppy (*P. reticulata*). The local variety of *P. sphenops* in the three islands had been described already in 1887 by van Lidth de Jeude as *P. vandepolli* (named for its collector, van de Poll). The vernacular name of the local molly is *machuri*. In the early 1960s, Constance Feltkamp and Ingvar Kristensen investigated the islands, and later they wrote the article "Ecology and morphological characters of different populations of *Poecilia sphenops vandepolli*." They give the following facts of the local molly in the three islands:

The males mature at a size varying from 2.1 cm [eighty-two-hundredths of an inch] to to 3.2 cm [1.25 inches], total length; in females the variation is from 2.3 to 5.5 cm [nine-tenths inch to 2.2 inches]. In general the females outnumber the males, the ratio being often 2 to 1. In the Netherlands Antilles [i.e. ABC islands] Poecilia sphenops is found in fresh and brackish water, especially in rivulets. They are also common in freshwater "tankies" [pools] and ponds, which they reach from the sea during a flooding from torrential rains. The molly is very common in sheltered lagoons and in the inner bays, especially where mangroves are present. Some of the lagoons are brackish in the rainy season and supersaline in the

ARTICLE AND PHOTOS BY RONNY LUNDKVIST dry season — others are supersaline almost the whole year through. Here, mollies are found in salinities up to 8 percent, in exceptional cases even to 13.5 percent.

However, much has happened in the last 40 years. Poeser redescribed the local molly in 1992, and it got

back its original name, *P. vandepolli*. The description of a subspecies from Aruba, *P. vandepolli arubensis* (van Lidth de Jeude 1887) was disregarded by Poeser at the same time.

TO THE ABC ISLANDS

Growth of tourism, urbanization, agriculture and road construction generally cause loss of habitats for native species of all kinds. In late 2004, I went to the islands to see what possible impact these factors may have had on the distribution of the local molly, especially on Aruba, due to the growth of tourism there. I



also looked for P. vivipara.

Permanent natural freshwater habitats are scarce — a few in each island. However, there seem to have been more in the past. These habitats are wells or watering holes. There are also nonpermanent, natural freshwater habitats. Among these we find seasonal streams, called *roois* (possibly from the Spanish *arroyo*) that empty into the sea or a lagoon. These streams are usually dry by spring. However, there are some *roois*, at least in Aruba, that hold water all year round, even if they can be very meager. These rare *roois* are connected to a watering hole (*pos/put*).

Semi-natural and artificial freshwater habitats constitute a third category. Here we have one former saltpan in Aruba, now filled with freshwater agricultural dams and reservoirs, some of which can contain water all year round, provided there is no severe drought.

So, if you want to find mollies in a permanent, natural freshwater habitat, look into a *rooi* that is connected to a *pos/put* and empties into the sea or a lagoon. However, they seem to be rare nowadays.

During my stay, I found mollies in Aruba at three locations: the wetlands in northwest, at Bringamosa and Modanza, both close to Arikok National Park; in Curacao at two locations in Willemstad; and in Bonaire at Sorobon. (See the end of the article for a URL leading to tables discussing water quality at these locations.)

I did not spot *P. vivipara*, but I think it is a question of mistaken identification. Males of *P. vivipara* may resemble those of *P. vandepolli* by a shoulder blotch. They also reach about the same size.

Poecilia vandepolli varies considerably as to pigmentation within a population. Some males have a shoulder blotch (more

or less faint), and others display small black marks in the same place, especially when courting. Among the 22 specimens that I collected as tiny fry at the beginning of December, five had developed gonopodia by May and June (i.e., had become males). In September, the largest male had reached 1.77 inches and the largest female 2.4 inches. By then, two more males developed gonopodia, being at least 10 months old. In December, the last male became sexually mature at the age of 12 months. Time to maturity seems to be genetically determined, as in sailfin mollies.

The species seems to do well in a tank but requires rather warm water, 80 to 86 degrees Fahrenheit. This fish eats mostly everything, including its own offspring. They are not only apt to eating the young; they chase them ruthlessly like tiger barbs. *Poecilia vandepolli* is a very active species and demands plenty of space, but a 20-gallon tank will do for 10 to 15 specimens.

So the next time you go for scuba diving, snorkeling or birdwatching, why not choose the ABC islands? They are friendly, safe and clean. And most importantly, do not forget to look for the local molly (*P. vandepolli*).

Ronny Lundkvist has kept fish since the mid-1950s. He has been a member of his local aquarium society since 1960 and a member of a Scandinavian livebearer association, "Poecilia," since 1977. He has collected several molly species in the ABC Islands, Guatemala, Mexico and Florida.

Get more info on these mollies!
For water chemistry info, go to
FishChannel.com/ABCTables
and learn about their adaptability at
FishChannel.com/ABCAdapt

Literature Cited

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