he was about 10 years old, he found a small tortoise about the size of a dinner plate on the outskirts of Puerto Baquerizo Moreno on San Cristóbal. Only a short time previously, several tortoises had escaped from a makeshift corral at the Port Captain's headquarters. The juvenile tortoises had been confiscated by local authorities from a fishing boat that had brought the tortoises from the northern coast of Volcán Wolf on Isabela. It was common knowledge among Galápagos fishermen that in contrast to most areas of Galápagos, tortoises nested near the shoreline on Volcán Wolf, and it was possible to find juvenile tortoises living within a few 100 m of the coast. Since no tortoises lived on San Cristóbal near the port, the tortoise found was undoubtedly one of the escapees.

Bernardo took the tortoise home where he and his brothers and sisters raised it as a family pet. The tortoise was found around 1945, and based on its size at the time, it must have been 3-5 years of age. The tortoise stayed with the Gutiérrez family and had grown to a large size by the late 1960s when the tortoise was returned to Santa Cruz to comply with the law prohibiting tortoises being maintained as pets. However, Bernardo is still able to distinguish the tortoise that he raised from the others in the captive herd on Santa Cruz by a particular scar on the shell resulting from an injury which the tortoise received when it unwisely tried to invade the Gutiérrez kitchen.

With some allowance for an error of 1 or 2 years in the calculation of the probable age of Bernardo's tortoise, the tortoise is 46 to 48 years of age and probably hatched from an egg between 1940 and 1942. Thus, this tortoise measuring 121 cm in shell length and having the demeanor of a giant patriarch is in fact less than halfway to attaining a century of life, and younger than many of the admiring visitors that visit the corral where he lives. These facts testify to the fact that Galápagos tortoises reach their large sizes in only a few decades, but this does not preclude the possibility that they do indeed live to ages matching or exceeding maximal longevity for humans. Recent field data collected as a part of Park conservation programs strongly suggest that some tortoises reach maturity 15-20 years after hatching and that after maturity, growth nearly stops in females and slows significantly in males. Thus the tortoise probably had achieved most of his growth prior to arriving on Santa Cruz and has grown quite slowly over the last 20 years.

Should you visit the tortoise corrals at the Park/Station Headquarters, you might recognize the tortoise pictured in this article. Among Park and Station personnel, he is known as "Guardian" and he bears a codified registration number of 48. He may be big and even majestic, but please don't consider him old. Tortoises have feelings too!

TWO NEW BUTTERFLY FISH RECORDS FROM WENMAN ISLAND

By: Godfrey Merlen

Last summer (29 May-2 June 1987) I had the opportunity to revisit the northwestern outposts of Galápagos--the islands of Culpepper and Wenman. I had visited Wenman several times over a number of years while working on the *Beagle III*. Originally I was part of a crew responsible for the placement and maintenance of a series of tide-temperature gauges organized by NOAA, the National Oceanographic and Atmospheric Administration of the United States, and Wenman had been one of the selected sites. It was marvelous to return to this island where the cliffs are alive with seabirds. Especially notable was the occasional sight of the pelagic sooty tern *Sterna fuscata*, which is an extremely abundant species in the Central Pacific, but within the Galápagos Archipelago only breeds on inaccessible Culpepper.

However, this time we were on a diving expedition, again on the faithful *Beagle III*, and we dropped our anchor in the familiar anchorage facing the western ocean in a flat, calm sea. We chose as our main diving area the two rocks, one large and the other small, just offshore from the southwestern point of Wenman (Fig. 1). We dived first on the outer vertical wall of the large rock, but later found that the channel between the rocks and the precipitous cliff of the main island was much more productive with its steep walls, boulder slopes, and stronger currents.

A questionable highlight of the dives was encountering several schools of hammerhead sharks with up to 20 individuals in a group. The sharks occasionally came so close that we could count their teeth. Numerous bottlenose dolphins in the area also showed an active interest in us.

The most exceptional fish sightings for me were two fish which have not been recorded from the Galápagos (Fig. 2): the raccoon butterfly fish (*Chaetodon lunula*) and the threadfin or golden butterfly fish (*Chaetodon auriga*) which were seen in close proximity to one another just to the southeast of the small rock. They had found something of a lee from the swirling foamy waters in a depression behind some rocks. The bottom between the two exposed rocks was rather flat and shallow (2.5-3.0 m or 8-10 ft). These fish were exceptionally attractive and recognizable with their bold stripes and markings. I had previously observed both species while diving off Christmas Island in the Central Pacific and in the Hawaiian Islands, where they are common.

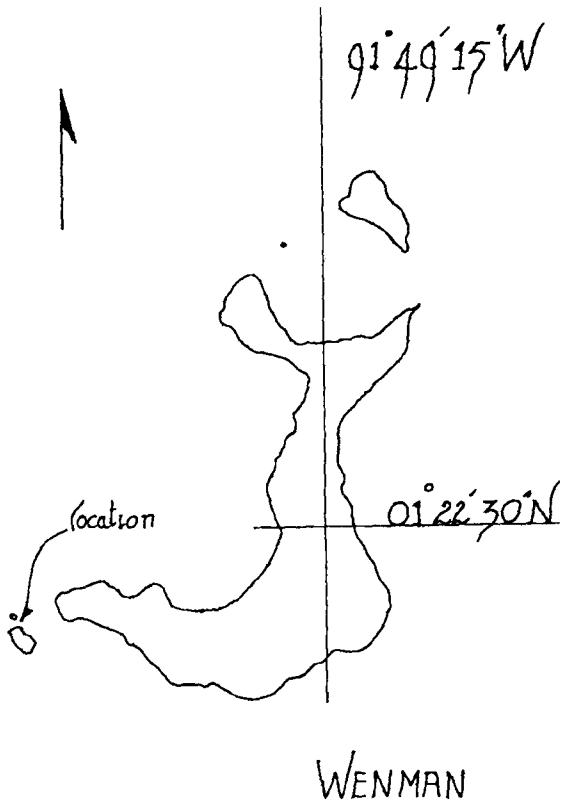

Figure 1. Wenman Island and the location where observations of butterfly fish were made. Isla Wenman y el lugar donde se realizaron las observaciones de los peces mariposas.

A third butterfly fish (*Chaetodon kleinii*) was seen for the first time after the 1982-83 Niño season. Jack Grove observed one at Marchena; I saw one at Bartolomé and, as recently as January of 1986, I found a pair at Bartolomé.

There are three butterfly fish resident in the Galápagos Archipelago which are all found only in the Eastern Pacific. These are: 1) *Chaetodon humeralis*, three-banded butterfly fish; 2) *Chaetodon falcifer*, scythe marked butterfly fish; and 3) *Johnrandallia nigrirostris*, barberfish.

Butterfly fish are associated with reef systems, and in the Galápagos, rocky shorelines. To travel the distance from the Central Pacific is an amazing feat, even if completed in a larval form, as the nearest islands are well over 3,000 nautical mi away. It is of interest, however, that the equatorial countercurrent, which is an east-going water mass sandwiched between the north and south equatorial currents which flow westward, may have an effect on the two northernmost islands of Culpepper and Wenman, and allow them to experience a warmer, more tropical climate potentially offering a haven for fish drifting across the vastness of the ocean. The red-tailed trigger fish (*Xanthichthys mento*) is a common resident at Wenman but occurs nowhere else in the Archipelago and is perhaps a good example of this method of arrival from the Central Pacific.

Finally, it may be worthwhile to ask how long these two vagrants had been here. This we cannot answer. Had they arrived during the Niño season of 1982-83 and managed to survive for several years, representing a rare occurrence? Or do fish of these species arrive regularly but fail to breed successfully and thus remain scarce? Increased diving and research activity in Galápagos will hopefully result from the declaration of the Galápagos Marine Reserve and may help resolve these and other questions about the marine biology of the area.

Godfrey Merlen, Isla Santa Cruz, Galápagos, Ecuador.

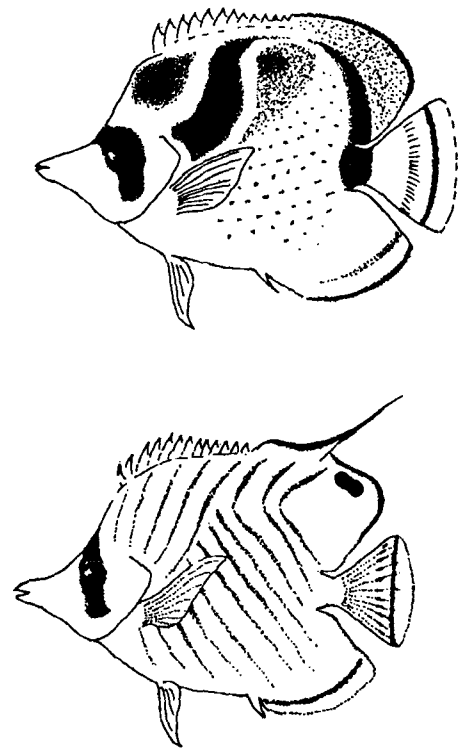

Figure 2. The raccoon butterfly fish, *Chaetodon lunula* (above), and the threadfin butterfly fish, *Chaetodon auriga* (below), found near Wenman Island in 1987. El pez mariposa mapache, *Chaetodon lunula* (arriba), y el pez mariposa aleta hilada, *Chaetodon auriga* (abajo), encontrados cerca Isla Wenman.