

MIKE A. McCOY, EXECUTIVE DIRECTOR
18 May MICRONESIAN MARITIME AUTHORITY
P. O. Box D
George, Ponape, E. Caroline Islands 96941

This was provided me by the author recently. He hasn't been on Ulithi for about 25 years, and most of the research was done in early 1950's, with later thru correspondence & research in libraries. Nevertheless, a very good description of past practices. Have sent a copy to Roger Pflum for his information.

Will arrive Honolulu 26th May and on to Kona w/family. In Hono 29th-30th for NMFS review courtesy of Doyle Gates. Then to mainland for travel & 1st vacation in a while.

Mike

1983

P 1188
BAIT
NET ?

SEA TURTLES AND RITUAL: CONSERVATIONS IN THE CAROLINE ISLANDS

WILLAM A. LESSA

Chelonia mydas is becoming an endangered species in the Caroline Islands not only because of changes in the technology of green turtle harvesting but also the traditional attitudes of the native peoples of these islands towards the species. Ulithi atoll provides the best example of the restraining role of sacred interdicts over the years, as well as the problems arising out of their inexorable erosion.

Although much attention has been given in the literature to the ritualistic proliferation and catching of marine fauna in Oceania, relatively little has been devoted to the ritualistic restraints placed upon their consumption. It may well be, of course, that this is because the former greatly predominates over the latter; yet, the effects of restrictive controls deserve to be examined more closely for their ecological significance in the non-industrial economies of the Pacific islands. It is my purpose to illustrate the positive functions of a certain set of traditional taboos imposed during the recent past, as well as the present, in the Caroline Islands of Micronesia (Fig. 1). These taboos are concerned with the green turtle, *Chelonia mydas*.

This spectacular marine animal, so named because of the greenish color of its fat, has been called the most valuable reptile in the world because of its attractiveness as an article of food; but this has led to overturtling and reduced it from its formerly vast numbers to only a small remnant. The heavy creature can attain a length of 4 feet and a weight of 400 pounds, and sometimes much more. The dorsal shell, or carapace, of the male is longer and more tapering than that of the female. The male has a long, 8-inch tail with a nail at the tip; the female tail hardly reaches beyond the edge of the carapace. The feet of the green turtle are flipper-like. As in all testudinales, teeth are lacking. The habitat of this turtle is shoal water with submarine vegetation. The adult is predominantly herbivorous, eating principally marine vegetation, but it will also eat fish, jellyfish, mussels, oysters, and clams. It is a powerful swimmer, attaining a speed of 1.4 miles per hour. The female lays eggs as often perhaps as five times a year, the soft eggs averaging well over 100 at each nesting. The only time it leaves the sea is for the female to deposit the eggs, slightly larger than ping-pong balls, in holes she digs with her hind flippers in sandy beaches above the high water mark. The incubation period is about 53 days. The flattened ventral shell, or plastron, is fairly pliable and gives little bony support, so that when the turtle is captured it will quickly die because of the great pressure on its lungs and

1183

1983

LIBRARY OF
GEORGE H. BALAZS

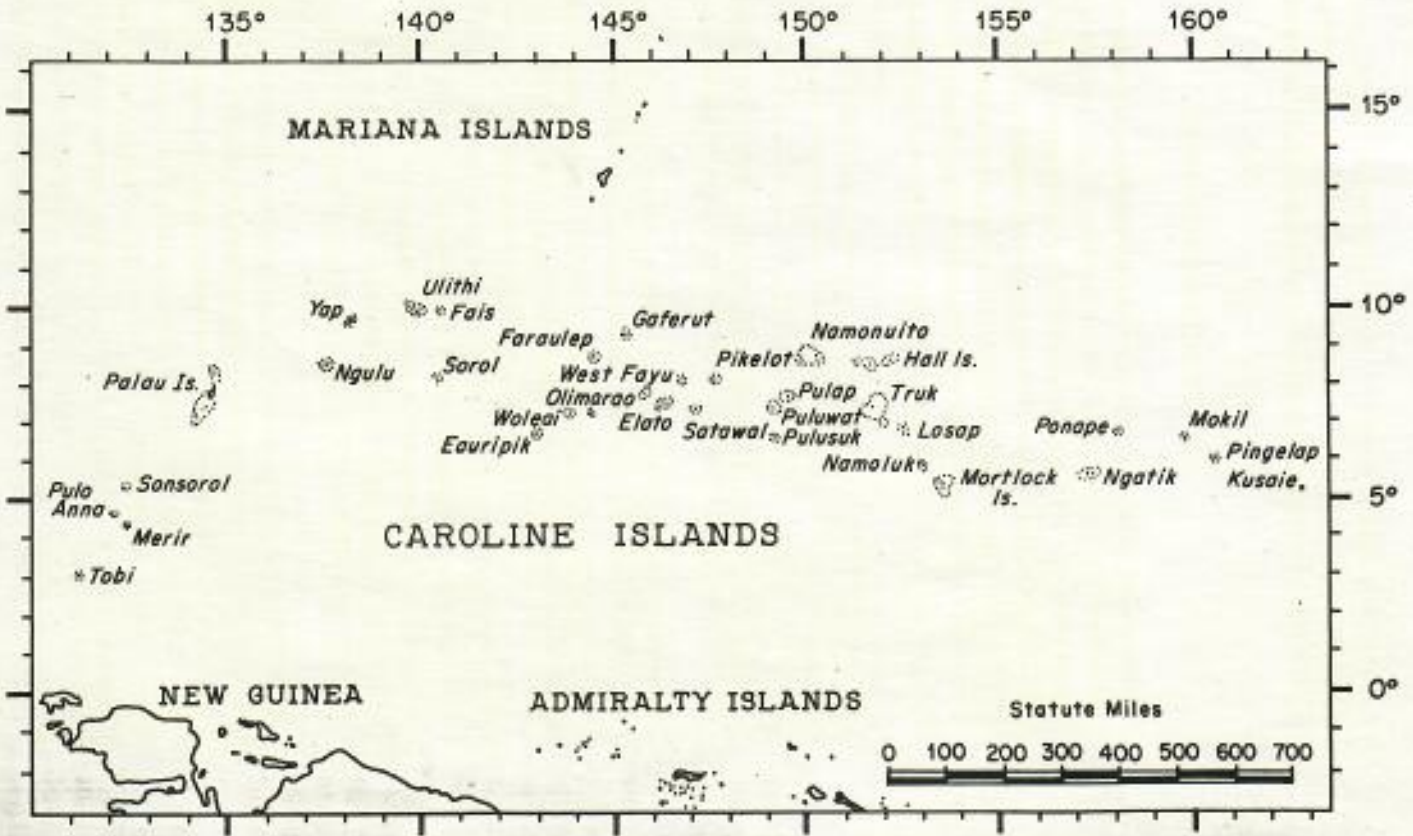


Figure 1. The Caroline Islands

other internal organs, unless it is turned over on its back or placed in water. The carapace and plastron are incapable of completely covering the head and limbs when they are withdrawn. The longevity of *Chelonia mydas* seems to be no more than 15 years.

HARVESTING TECHNIQUES

Indigenous methods of harvesting green turtles in the Carolines vary somewhat but show no great departure from methods found throughout the rest of the world. They reflect certain basic characteristics of the chelonians. One is that although they are marine animals, the females must come on land periodically to deposit their eggs in the sand. Another is that females coming ashore are particularly desired because they are fattened and carry edible eggs. Still another trait is that the turtles mate in the sea, mostly at the water surface, at which time they can be captured without undue difficulty.

On Sorol atoll, when the natives want to catch turtles on land they hide in the thicket with poles, and then as soon as the chelonian has dug a hole to spawn, they throw the poles at its head, so that it will attempt to flee in the opposite direction. Meanwhile, some other men grab it with their hands. After they have captured a turtle, both men and women clap their hands and sing a turtle song (Damm et al. 1938: 240).

When Puluwatans capture turtles on the beach of the uninhabited coral island of Pikelot, they easily render them helpless by stepping on their tails and flipping them on their backs with a quick heave. They then tie them up and drag them to their canoes, or tether them with a rope on one flipper and make them swim around the island if their canoes are farther away (Gladwin 1970: 41).

The islanders of Truk were observed in 1912 to find it more rewarding to catch turtles on the sand islands than in the water. When the men discovered a turtle nest in the sand, they tried to ascertain immediately whether or not the reptile would come back to lay. They believed that the turtle has four ovaries and therefore builds four nests. If the animal returned, they would lie in wait for it and turn it on its back (Bollig 1927: 150).

Like other Carolinians who seek out turtles making their seasonal visits to uninhabited islands, the Trukese attempt to predict the arrival of the animals. Their method is one of divination, in which the men must first find tracks in the sand and then locate eggs buried in it. If they succeed, they count the eggs and tie knots in a length of palm leaflet according to the last digit in the total number of eggs. Thus, if the eggs total 145, then five knots are tied. Each day thereafter a knot is removed, and when the fifth day, corresponding to the fifth knot, arrives, then the turtle will return. The knots are tied according to a knot-divination method called *pwe* (LeBar

1964: 70).¹ A variant method employed on Truk is devoid of divinatory implications and simply involves counting the odd number of eggs over even hundreds, this giving the number of days after which the turtle would be expected to return. Thus, 217 minus 200 equals 17 days (Trust Territory 1961: 1). In other islands of the Carolines, similar methods, likewise depending on the number of eggs found, are used to predict the return of an egg-laying turtle, but they seem to have no empirical basis.

Capturing green turtles at sea is less common but more adventurous and sportful than gathering them on land. The following method was noted early in the present century on Merir island, in the westernmost part of the Carolines. Four men go out in a canoe beyond the reef and two of them rope themselves together. At the mating season the chelonians stay on the upper surface of the water, and when the fishermen see a pair, the two men who are tied together jump into the water. The other two men hold the ends of the ropes in the canoes. Each of the two swimmers grabs a turtle, throws himself on the animal's back, and puts his left arm under the left front flipper and his right arm over the right shoulder. Then the men in the canoe pull in the ropes and draw the swimmers and the turtles slowly up to the boat. When they are close enough the men in the canoe throw a snare over the turtles' front feet. This fastens them together crosswise, and they can then be laid on their backs in the bottom of the boat (Eilers 1935: 391, 393). Essentially, this is also what is done on Sorol (Damm et al. 1938: 240).

Early in the twentieth century the men of Mokil atoll were taking advantage of the misguided sexual urges of turtles. During the mating season a turtle would mistake a man in the water for another turtle and eagerly approach him, whereupon the swimmer would have no trouble in slipping a noose around the turtle's leg so that it could easily be landed from a canoe (Bentzen 1949: 68 fn. 2). Nowadays chelonians are much scarcer in Mokil and are caught by two men, one using a harpoon-tipped spear while the other handles their canoe. After spearing the turtle the swimmer climbs back into the canoe. The turtle is played from the end of the long line that is wound on a floating wood cylinder, and the men watch for the cylinder as it bobs along the ocean in tow of the turtle (Bentzen 1949: 68).

Mating turtles are captured in a different manner in the lagoon of West Fayu atoll by people from Satawal island. A close lookout is maintained during the day, and as soon as mating turtles are spotted a canoe speeds to the position. Two men, each carrying a large hook affixed to a strong line, quietly swim up behind the turtles, who are hardly aware of their presence. The hook has been placed previously in a notch at the end of a stick or piece of bamboo about six feet long, and the end of the line tied to a large boom on the canoe. Swimming under the mating

¹ There is far more significance to this passing statement about knot-divination than meets the eye. Found scattered throughout the Carolines, *pwe* has considerable influence on the daily lives of the people (Lessa 1959).

animals, each man hooks one of them with his hook in the skin on the turtle's neck. Upon being hooked, the turtles immediately sound and a pulling contest ensues, usually lost by the turtles (McCoy 1974: 213). These same natives employ a more dangerous method if the gear for the preceding method is not available, especially when the men happen to be on fishing voyages and unexpectedly sight mating turtles. The men similarly swim up silently to the unsuspecting chelonians, grab each in a "full nelson" hold from the underside, and with their hands placed under the turtle's chin, force back its head, reducing the risk of being bitten. Other men in the canoes jump into the water with whatever ropes are available and try to tie the front flippers so that they can drag the turtle on board (McCoy 1974: 213). Another method used by Satawalans is called *efitefit*. An already captured female is tied on a moonlight night to a tree and allowed to swim in the shallow waters of West Fayu. Climbing into trees near shore, men wait for her to attract males. *Efitefit* is more successful on Pikelot and other islands where there is no lagoon (McCoy 1974: 213).

The Trukese have a novel method of capture used on fortuitous occasions. Should a green turtle happen to surface for air in the immediate vicinity of a canoe-load of men, the latter frighten the turtle by immediately beating the water vigorously, causing the reptile to submerge without having first obtained sufficient oxygen. The turtle remains in a groggy condition and is easily caught by one or two men. It is then towed ashore (LeBar 1964: 70).

Dragnets are used in some places in the Carolines, such as on Ponape, a basaltic island surrounded by a steep-to fringing reef (Trust Territory 1961: 10-11).

The men of Truk, too, used to catch turtles at sea by means of dragnets, this being done at night. In some places in this island complex, charms were attached to the long, broad-meshed nets in order to make the turtles go into the net at that very point.² Two turtles drifting about during sexual intercourse, however, were not to be caught, because of a "superstitious" fear that sudden death would ensue (Bollig 1927: 150).

A method that used to be especially popular and apparently effective has been reported for Ponape, where during the windy season drifting seaweed that was carried outside the reef by the tide would be followed by the men because it attracted turtles who would come there to feed. As soon as a turtle was sighted an expert swimmer would jump on his back and tie one of the hind legs of the reptile with a rope (Trust Territory 1961: 10). The Ponapeans now commonly use a method in which a marked area on the beach is baited with a certain kind of seaweed said to be

² A net formerly used on Truk has been examined in detail by an anthropologist who worked there in 1947. He says it was frameless, made of coconut fiber, and 77 feet long and 9 feet wide. According to his informants, the net was used at night, during the breadfruit season (July and August) when the tide is particularly high. The net was stationed semicircularly in fairly shallow water and was kept upright by a series of long poles whose bottoms rested on the sand. While some men handled the net, others drove the turtle into it (LeBar 1964: 89, 90, Fig. 54. Cf. Trust Territory 1961: 1).

irresistible to turtles, and when the animal comes up to feed, the fishermen spear it (Trust Territory 1961: 60).

The Yap islanders apparently never pursued much the harvesting of turtles and their eggs. However, in addition to surround nets, they did use weirs of coral rocks and bamboo. If turtle harvesting in those parts was desultory it was either because sea turtles are not common to the waters around Yap or the methods employed were ineffective, or both (Trust Territory 1961: 3-4).

PRACTICAL RESTRAINTS

The preceding techniques are obviously based for the most part on empiricism. A lesser but still obviously practical factor enters into certain restraints that impede Caroline islanders in their quest. The distances involved and the time consumed in simply reaching most of the nesting islands have always served to inhibit the catching of turtles. The men of Satawal, for instance, must make a 47-mile voyage to their uninhabited resource island of West Fayu and a 54-mile trip to the tiny island of Pikelot, while the people of Puluwat, who also visit Pikelot for turtles, must travel about 100 miles to this atoll (Fig. 2). The uninhabited resource island of Gaferut, used by Faraulep, is 60 miles from the latter and more than double that distance from Wolc'ai and Ifaluk atolls, which also use it, albeit to a lesser extent. Of course, not all nesting islands are that far away. Olimarao atoll, which is exploited by the people of Elato atoll, is only 21 miles distant from the latter and less than that from Lamotrek atoll, which similarly exploits it. Some turtle hunters work only within their own island groups, as do the people of Yap, Ulithi and Truk, among others. Nevertheless, almost any canoe trip is time-consuming and often hazardous, even within lagoons.

ARTIFICIAL RESTRAINTS

However, it is the man-made restrictions that concern us here, and these are rooted in the ancient sacred attitudes that Carolinians have towards sea turtles. These attitudes do not have uniform sources and expressions, but they are ubiquitous. Thus, when members of the Hamburg Südsee-Expedition visited Ngulu atoll in 1909 they found that although there were many turtles, for unascertained reasons the eggs of all turtle species and the meat of the "genuine" (green?) turtle were not to be eaten, and that turtle-catching, moreover, was said to be forbidden at certain times (Eilers 1936: 214).

The inclination of Carolinians for bestowing negative sanctions upon turtles may be seen more clearly where chelonians are regarded as totems of descent groups. For example, the Souwen and Katamang clans on the island of Satawal have turtles as totems, and the members of these clans as well as their spouses have to observe



Figure 2. A Puluwat canoe returns with turtles from Pikelot. (Photo by Thomas Gladwin, *East is a Big Bird*. Courtesy Harvard University Press.)

special taboos in addition to those of island-wide application. One such taboo forbade any pregnant woman or her spouse to eat turtles (McCoy 1974: 216).

A more specifically religious association is that between turtles and gods, and this may be seen in the Sonsorol islands, where it is said that a god, Laigune or Laigim, stands in the sea and watches over his sisters, the turtles. He descends from heaven as soon as he sees one. Another deity, his sister, is Vari, a turtle that formerly lived in a house. But she demolished the building, and her father chased her into the water, where she still is. She comes ashore only to lay eggs (Eilers 1935: 65-66). On the high island of Kusaie, the easternmost of the Carolines, the turtle was the animal of Nosunsap, the greatest celestial deity, and turtles that had been caught in the Nefalil district were first brought to a certain large *Barringtonia*, whence they were finally taken to the god's taboo-place, Keanmuan (Sarfert 1919: 418). The cult of this god had eight priests, and for them the turtle was taboo (Sarfert 1919: 402). It is reported, furthermore, that in Kusaie green turtles were singed on their back with coconut leaves in order to chase away the spirits of fishing (Sarfert 1919: 115).

THE EXAMPLE OF ULITHI

Evidently, the most powerful of the traditional restraints on the killing of green turtles are those on Ulithi atoll. Located (on Mogmog island) at 10°05' N, 139°43' E, it is the largest atoll in the West Caroline Islands, and consists actually of four elements: first, the atoll proper, with its vast lagoon; second, the large adjacent island of Falalop; third, a cluster of islets on a small detached reef located east of the main atoll; and, still further to the east, an incomplete, mostly submerged atoll with two islets (Fig. 3). Of the more than thirty little islands in this whole group, only a few have ever been inhabited, and today their number has been reduced to four or five. Most of the turtles captured by Ulithians nest on the island of *Losiep* (in the third element listed above), and the islands of *Gielap* and *Iar* (in the fourth element); but they are also caught on some of the many small uninhabited islets of the main atoll, especially *Pig*.

Ignoring recent changes for the moment, the people of Ulithi may be described as simple horticulturalists who depend on the sea for most of their protein foods. The social organization, aside from the nuclear family, is based on numerous but small matrilineages that exercise important economic, political, and religious roles. At the head of each lineage is a male chief who inherits his position matrilineally by virtue of his seniority in the descent group. There is a clearly defined rank order for the more important lineages, the one holding the number one position being the *Lamathakh* (actually extinct but maintained by the *Fasilus* lineage), and the one holding the number two position being the *Lamrui* (also extinct but maintained by the *Hofalū* lineage). It is the *Lamathakh* lineage which furnishes the atoll chief or so-called king, who is at the same time the chief of the "Lamathakh" landownership district, which includes various small islands and especially that half of Mogmog known as *Lul-le-paling*. The *Lamrui* lineage furnishes the chief of the "Lamrui" ownership district, which includes that half of Mogmog known as *Lul-le-eawachich*. Each village has a council of elders headed by a *metang*. The Mogmog council's *metang* rather than the king presides over the atoll-wide council when it meets, and it should be observed that he is drawn from a lineage belonging not to the superior *Lul-le-paling* but the lower ranking *Lul-le-eawachich*. This serves to keep a certain balance of power between the two halves of the island of Mogmog, the king being drawn from a lineage in the other half. Mogmog is the spiritual and political hub of the atoll, and its two leading lineages each have their plots, traditional house, common hearth, and canoe sheds on that island. Another feature of the social system is that each of the several lineages throughout the atoll has a pool of ancestral ghosts. Although celestial and terrestrial deities are recognized, the ghosts of the ancestral cult are the real mainstay of the everyday religion. Social control is exercised to some extent through the protective and punitive roles of the ghosts; however, most social control is exercised through ridicule, gossip, and public opinion. But a legal institution called the *harmechung* or *ubwoth* constitutes

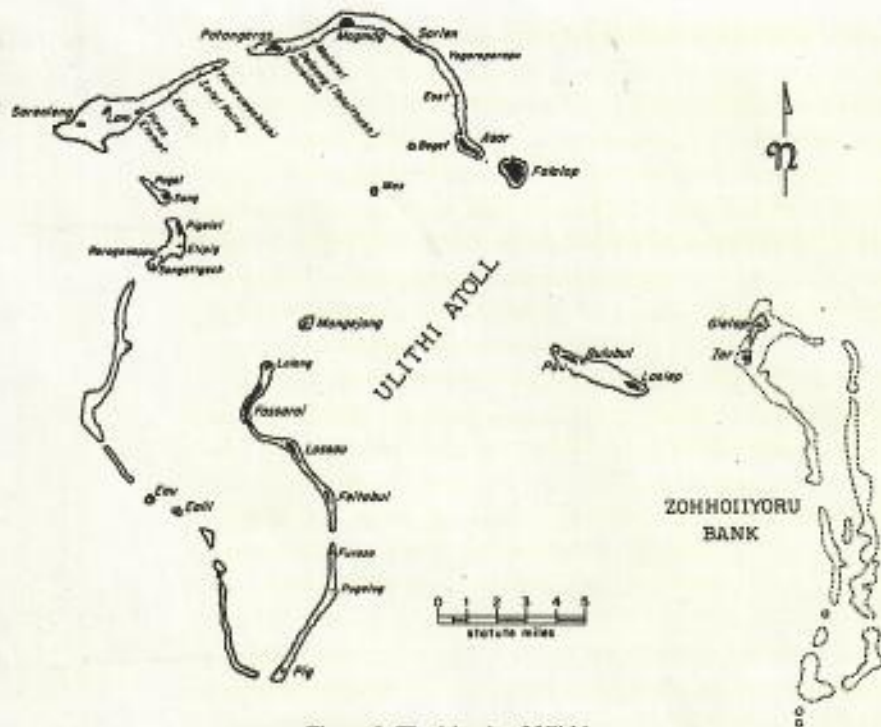


Figure 3. The islands of Ulithi

an important formal system of restraint in matters involving property violations. A final feature of the Ulithian way of life is its position in the miniature Yap empire. Ulithians, as well as the inhabitants of a string of islands extending hundreds of miles to the east, are considered to be low caste by the people of Yap, and are required to send "rent", political tribute, and religious offerings to Gagil district in that island group, which is about 85 miles westward of the atoll (Lessa 1950; 1966: 35-39).

The population, which in 1949 numbered only 421 persons, has been rapidly expanding beyond that figure, placing increased pressure against the limitations on turtling.

MYTHICAL CHARTERS

At least three local myths have served as charters for the right of the so-called king or atoll chief to demand all captured green turtles as his property, to be disposed of by him in accordance with strict traditional procedures. Each of the stories eventually involves an ancestral spirit named Iongolap, whom Ulithians allege was one of the two lineage ghosts belonging to the special category that they call *tuthup paling*, or great ghosts. The importance of Iongolap originally lay in his

function as a highly reliable prognosticator, but this role declined almost to the vanishing point with the rise in the last century of a rival *tuthup paling* named Marespa (Lessa 1976). However, Iongolap retained enormous importance because of his high standing in the Gagil district of Yap, which for centuries has exacted tribute from the far-flung eastern islands that constitute its empire. There seems to be no doubt that Iongolap has some sort of ultimate source in Yap, but Ulithians like to claim him as one of their own because of his alleged birth in their atoll. Certainly, they and the other satellite peoples of the Gagil domain, reaching almost as far east as Truk, acknowledge him as the most important figure in the tributary system maintained by their overlords on Yap.

To return to the three myths mentioned above, there is a narrative about a woman named Melehau, who had three brothers living in different villages on Yap. She left them and went to live on the island of Losiep, located on the reef between the main atoll of Ulithi and the partially submerged atoll to the east. Not liking Losiep, she built a fire and followed the smoke to the island of Mangejang, in the main atoll. She did not like living there, either, so again she built a fire and followed the smoke to the island of Mogmog. Liking Mogmog, she remained on it and gave birth to Iongolap, telling him that he and she were the chiefs of Yap and that all temples there belonged to them. Melehau told her son to pray to the spirits to provide Ulithi with a plentitude of plant foods and fish. Iongolap told the people of Ulithi that whenever they caught any turtles they should take them to him and his mother on Mogmog. Then he went to Yap and prayed for Ulithi (Lessa 1962: 154).

A second myth recorded on Ulithi begins with Iongolap already living on Yap with his sister Filtei. Because she had been given only the flippers of the turtles that the people were killing, she left Yap in a pique, and strewing sand on the water she created Ulithi, where she went to live on Mogmog. One day, Iongolap came to her and informed her that from then on all the turtles killed by the people belonged to her (Lessa 1962: 154).

A third Ulithian myth, collected in 1909 by Paul Hambruch, relates how two of Iongolap's sisters, Liomamar and Ilabulue, living on Yap, became angered when a turtle was divided up by the people of the house and they got only part of the fins. The same thing happened the next day after another turtle had been caught by the men. In anger, one of the women (Liomamar) walked out on the sea and created a whole island group by strewing sand on the water.³ Then she inspected the whole group, but Mogmog first of all. Next she went to Eor (Iar), and there on the sand she laid a turtle fin she had brought from Yap, and since that time this islet has had

³ Although the strewing of sand on the sea to create islands is peripheral to our interests, it should be noted that the motif is associated with major stories found in Malaysia, Melanesia, Micronesia, and Polynesia, and is comparable to the fishing up of islands by the demi-god, Maui (Lessa 1961: 275-289). It is testimony to the importance of turtles that they are often found associated with such myths in Carolinian mythology.

many turtles. Finally, she returned to Mogmog (Damm et al. 1938: 359). Variants of this ubiquitous tale type, with changes in personae, are found all the way from Yap and Fais to islands near distant Truk, and link Iongolap to the tribute that must be taken to Gagil district in Yap.

Essentially, what these examples indicate is that myth-makers have served to endow the sentiment towards sea turtles with an aura of antiquity and sacredness that justifies the special, privileged position of the island of Mogmog and its atoll chief.

Falalop has a special obligation to deliver green turtles to Mogmog. In addition to the patently mythical justification already mentioned, there is a purportedly historical one. Tradition states that long ago the then inhabited island of Losiep bested Mogmog in a war and that, in order to retaliate, the people of Mogmog cunningly decided to give the king's daughter to the chief of Losiep. She was to exercise such high virtue and morality as to put her husband to shame. The plot worked. He was so chagrined by his loss of face that he decided to retaliate against his enemies by overwhelming them with gifts of turtles. Accordingly, he ordered that henceforth any turtles caught by people under his jurisdiction must be consigned to Mogmog. Falalop enters into this because when ultimately the people of Losiep abandoned their island they went to live on Falalop, where they established the present village of Wililekh (Lessa 1962: 156-157).

THE TURTLE RITE

Further supportive of the green turtle tradition in Ulithi is the complex ritual that attends the killing of the chelonians and the distribution of their meat and eggs. This act is intimately entwined with the political system, and each reinforces the other.

The atoll chief, by reason of his matrilineally inherited position as head of the Lamathakh lineage and the Lul-le-paling lands of the island of Mogmog, is entitled to receive annually from all the people of the atoll gifts of certain kinds of food, called *maler tamol*. These foodstuffs — breadfruit, coconuts, mountain apples, certain fish, and green turtles — are not entirely seasonal but may nevertheless be called "first fruits", except that turtles, although they are caught mostly in the two lunar months corresponding roughly to May and June, may be harvested and delivered at any time of the year.

The people of the large island of Falalop are the main turtle catchers, and when they harvest turtles on those islands — Losiep, Pau, Bulubul, Gielap, and Iar⁴ — within their landownership district they first assemble them on the beach at Falalop

⁴ It will be recalled that the people of Losiep were once independent of Falalop but moved to that island when they abandoned their own. The small isles of Pau, Bulubul, Gielap, and Iar "belong" to Wililekh village on Falalop only because they are part of Losiep's old political district.

preparatory to dispatching them in canoes to Mogmog. During the voyage a west Carolinian dance called the *hamath* is performed by the men to the accompaniment of obscene songs, while the women behind at the beach also dance and sing the *hamath*, which is not only associated with turtles but also whales and, in an involved way, first menstrual rites, and even a kind of formal public criticism.

Sometimes turtles and their eggs are harvested on certain other islets by the people of Fassarai island, which has traditionally belonged to the king's landownership district but in recent years has begun to emerge as something of an independent political district whose people present their first fruits to their own chief.

When turtle canoes reach Mogmog the men drag the turtles up to a nearby plot of land called the Rolong, the most hallowed spot in the atoll. It is sacred to Iongolap, and offerings that are not taken to him on Yap may be deposited here. The Rolong is within the Lul-le-paling half of the island and was once the locale of the atoll-wide council house and, even though the house was destroyed by a typhoon in the nineteenth century and never rebuilt, it continued to be the place where new kings were invested and other major rituals performed.

At the Rolong, the king kills the chelonians one by one by clubbing them on the head with a hard stick from the *Pemphis acidula* tree. He prefaces this with an apostrophe to Iongolap, the *tuthup bwol* or "ancestor of the turtles," apologizing to him for what he is about to do and expressing the hope that the spirit will not punish him. The second highest ranking chief of the atoll, who belongs to the Lamrui lineage and has eminent domain over the Lul-le-cawachich has an important role in the distribution of the turtle meat, and he too addresses a prayer to Iongolap; but whereas the king prays also to the turtles, he does not. After the clubbing, a man chosen by the king from his own lineage slits the throat of each turtle and pulls out the intestines. The reptiles are then hauled back to the nearby beach and lightly roasted so as to make it easier to carve out the meat. Then they are dragged back to the Rolong.

The distribution of the meat now takes place, beginning with the presentation to the king of the head of the first turtle, which is removed by a man belonging to the king's lineage. Men from the Lamathakh (king's) lineage now begin industriously to carve out the meat on one side of the turtle, and men from the Lamrui (*metang's*) lineage compete against them on the other side, trying to outdo them. The meat and eggs belong to the two lineages and are placed in four receptacles. The front flippers are given to the people of the islands of Fais, Ngulu, The Woleai (an island area to the east), and Yap, but this is merely symbolic, except for any residents of Fais who might be living in Ulithi at the time. The hind flippers go to a particular Ulithian lineage (unascertained).⁵

⁵ An additional bit of information concerning apportionment has been furnished me by the anthropologist Inez de Beauclair, who in a personal communication written in 1961 says that a Yapese informant told her that the people on Ulithi shout "Fitei" when they cut the part of the turtle (the left

As compensation for catching and delivering the turtles, the men from Falalop who came over in the "turtle canoes", or *wal mol*, are given equal portions of meat and eggs. A more formal gift is given to the chiefs of the two highest ranking lineages on Falalop. This consists of the blood of the turtle, the carapace — with whatever flesh and fat that may still cling to it — and some of the foreflippers. The carapace is of course worthless.

Seldom is one turtle alone captured and apportioned. A single chelonian, although huge, can only supply a limited amount of food, restricted to certain people. Actually, a large number of turtles are ordinarily involved and the apportionment follows a set procedure in which the second and all subsequent even-numbered turtles are killed and distributed in accordance with the above rite, but the third and all subsequent odd-numbered ones are the object of a competitive sport lacking religious overtones. In this contest, a pair of strong and agile men from each of the two opposing landownership districts of Mogmog are selected to extract the meat and eggs of the turtles as quickly as possible for allocation to their respective districts, and although these are headed by the Lamathakh and Lamrui districts, the substances go to all of the lesser lineages that are based in these districts.⁶

The traditional green turtle complex in Ulithi should not be viewed as an isolated example. I am wholly convinced that the sparse references to turtles contained in the anthropological literature are due to little more than incomplete reporting, and I must inform the reader that I myself did not know about the turtle ritual on Ulithi until my third field trip. In this connection I note that in a second personal communication to me from Madame de Beauclair, written in 1962, she mentions that on Yap the son of the chief of Ngulu told her that there was a turtle complex on his own atoll. The turtles, he said, were killed with a *goi* shell, and there is an obscene dance, called *towar*, which is accompanied by obscene songs and participated in by both men and women. I mention this because I have never found more than a brief hint in the literature of a Ngulu turtle complex.

side of the breast) that is to be given to the women staying at the menstrual house. Furthermore, she gives it as her opinion that Filtei is somehow identical with Liomar (Liomarar), the sister of Iongolap mentioned in the third myth that I previously outlined. Still further, she says that according to Yapese mythology, Liomar is the daughter rather than the sister of Iongolap. The myth has other details that conflict with Ulithian versions, but such discrepancies are commonplace in the realm of mythology.

⁶ The hawksbill turtle (*Eretmochelys imbricata*), known in Ulithi as *hochop*, is not the object of the preceding ritual. Generally considered inedible in many parts of the world, it is not eaten on Ulithi, although as elsewhere it has been highly valued for its beautiful thin scales, which in the Carolines were used to make body ornaments, such as breast discs, ear pendants, arm bands, and wrist bands. While not the object of taboo, the hawksbill does, however, enter into a certain Ulithian ritualistic procedure as one of four kinds of objects, collectively called *mahos*, that an heir must present to the head of his lineage in order to exercise the right of usufruct tenure to the lands bequeathed to him by a deceased relative.

ASSAULTS ON TRADITION

The picture that I have drawn above of the Ulithian turtle ritual is an idealized one belonging to the recent past. Yet, although I once predicted correctly that mythological support for the rite had been so undermined by the inroads of foreign administration and Christianity that the complex could only find its future form and function in mainly economic and political considerations (Lessa 1962: 158), I now have reason to believe that the process of change has been slower than I had anticipated. The traditional role of myth and ritual is proving to be a still powerful set of evocative symbols imparting great authority to the exclusionist and therefore conservational practices surrounding the harvesting of green turtles. We may now examine the extent to which old practices have remained operative in the face of the assaults on tradition coming from modernization.

About the year 1940, during the Japanese administration, Ulithi received a new king named Rolmei, who belonged as he should to the Lamathakh (Fasilus) lineage, which headed the Lul-le-paling district. He suspended the turtle ritual because, despite being a pagan, he had for some reason not been installed according to the traditional rite, which was always performed at the Rolong site. He had failed to present the great celestial deity, Ialuluwe, and the great underworld god, Solal, with the obligatory chiefly loincloth, nor made the required invocations to them. Consequently, he felt that he was a flawed sovereign who lacked the authority to conduct the turtle rite. During his reign some people on the island of Fassarai killed a turtle, but out of fear of Japanese reaction, he failed to declare an *ubwoth* against them.

The ritual remained in abeyance during the reign of the next king, Wegeleamar, whose belated commitment to Christianity was somewhat tentative. Not having been installed according to pagan custom, he too felt that he would incur the wrath of Iongolap, the spirit of turtles, were he to perform the reptilian ritual. But he did not thereby concede that it was permissible to consume turtles surreptitiously. Thus, when around 1950 he discovered that some people of the island of Fassarai had again clandestinely killed and eaten a single turtle, he swiftly sent word of an *ubwoth* to the offending island, forbidding anyone to depart or do any fishing whatsoever. This lasted two or three months, after which the distraught and fish-craving islanders "united the *ubwoth*" by taking to Mogmog a gift or fine of loincloths, pandanus mats, cotton cloth, pandanus-leaf sail, rope, turmeric, hawksbill turtle shell, and so on — and apologizing for their act of lese majesty. The goods were divided among the two district chiefs of Mogmog, to be redistributed at their pleasure. Wegeleamar was a proud, forceful man and, although crippled by poliomyelitis, had firm control over his people. His political authority had carried the day in this crisis, due no doubt in part to lingering overtones of the old religion. He died in 1953.

There ensued a somewhat uncertain state of affairs when Malefich, the next man in the traditional line of succession, declined to succeed the dead king, who had been grooming him for the office. The Mogmog council of elders consequently chose another man, Sorekh, even though he was of the ineligible Metathou lineage, his father, however, being of the proper line. Just before the Trust Territory was to be notified of this decision, Malefich had a change of heart and Sorekh retired graciously from the scene. But Malefich never had either the inclination or the personality to really serve as atoll chief, and as a result the highly capable *metang* from Lul-le-eawachich, whose name was Ifanglemar, became the de facto ruler by agreement.

It was during the Malefich-Ifanglemar regime that the council of chiefs, all of them now at least nominally Christian, decided that turtles were going to waste and that they should risk defying the great spirit, Iongolap, by reviving the turtle rite despite their outward renunciation of paganism. This they did, with some minor adjustments in protocol. It was during this regime that I first learned about and partially witnessed in 1960 one of the rites, which had been suppressed during my two earlier periods of field work in 1947-1949. In retrospect, it is obvious that because the old traditions were being maintained, the consumption of green turtles was being kept within bounds, with sanctions imposed against those who flouted authority.

Recent events have proved that the turtle complex has retained a surprisingly unexpected vigor in the face of the tremendous changes being experienced in Ulithi — complete Christianization, the arrival of Peace Corps volunteers, the establishment of the Outer Islands High School, the installation of a radio transmitting station, and so on. The fact is that late in 1974 an almost startling exercise of the atoll chief's power took place, and it centered around the turtle complex.

To understand the turtle situation, it is necessary to recall the political situation. When the legitimate but merely nominal head of the atoll died in 1967, all pretense at maintaining the old line of succession was dropped by the atoll-wide council. He was formally succeeded in that year by Tahachilibwe, a Lamrui *metang* on Mogmog who had already been acting as the de facto head of the islands when his older brother, Ifanglemar, himself the acting head since the death of King Wegeleamar, died in 1961. Although Tahachilibwe's mother did not belong to the "royal" lineage, his father did. Born about 1896, this still-living chief, who is not called a king, is an imposing figure of a man, with much pride and a strong will.

Tahachilibwe has proved to be a formidable defender of certain chiefly prerogatives, including the requirement that all captured turtles be brought to Mogmog to be killed and distributed according to custom. When in 1974 the people of Falalop defied tradition by withholding green turtles, he was swift to act. For details of the relevant chain of events I am deeply indebted to a first-hand observer, Father John A. Walsh, S. J., who has generously allowed me to draw on his unpublished manuscript, "Killing of Turtles on Ulithi".

There had just been a preliminary but only mild distraint imposed on the island of Fassarai by Tahachilibwe. The *ubwoth* came as a reaction to the news that two young men had killed a small turtle. The *ubwoth* was declared on the same day, Saturday, 21 September 1974. Boats were not to go to sea. The matter was quickly settled when the chief of Fassarai went to Mogmog that very afternoon with a gift of loincloths, and the distraint was removed.

However, the next day, Sunday, a truly strong reaction to the unauthorized killing of turtles took place, this time on Falalop. As soon as Tahachilibwe heard of the violation he sent word to Falalop that the island was *ubwoth*. Says Father Walsh, who was there, "From then until October 3rd no one fished, swam, took sea water or touched the sea in any way". The distraint applied to children, as well as the old, the sick, the Peace Corps volunteers, and some Korean and Filipino workers living on the island. Exempted were the Catholic priest and the native health aides.⁷

On October 3rd the council members of Falalop went to Mogmog to meet with the council members there, and in the course of the deliberations Falalop piled up 73 loincloths before Tahachilibwe in order to have the *ubwoth* lifted, but not without asking that the turtle restrictions be ended on the grounds that they were being violated everywhere throughout the atoll. Tahachilibwe declined to do so, saying as he pointed to the spot on the Rolong plot of land where turtles were killed that he feared the spirit there (Iongolap?). He did remove the distraint, however, and later the loincloths were returned to Falalop.

Still restive over the denial of turtles to them, the chiefs of not only Falalop but all the other unprivileged islands of the atoll met with the chiefs of Mogmog to argue for a change in custom. This was on October 7th. No decision could be reached, but it was decided to accept the judgment of a prestigious Lamathakh chief named Hathilul, who although he had never assumed the title of atoll chief had become what was in effect a "secretary of the interior" and a "secretary of state".⁸ He listened to Tahachilibwe's reiteration of his fear that the spirit at the Rolong would not want him to change the tradition. Siding with Tahachilibwe, a man about 24 years his senior, he warned that too many traditions were being discarded on Ulithi and that various small groups should not be permitted to be a law unto themselves.

It should be noted that Tahachilibwe never claimed during this dispute that he was acting as an advocate of conservation, and in the meeting of October 7th "there was no talk of conservation", so this was not the real issue. The ultimate issue, as Father Walsh properly perceives, was and still is the opposition of Falalop to the

⁷ There is some disagreement locally as to the original scope of this *ubwoth*, behind which there were motivations and alleged provocations too involved to go into here.

⁸ These are terms used by Father Walsh. Although for personal reasons Hathilul spends most of his time on Yap, he is chairman of the conference of outer island chiefs, and thus exercises some of the duties and powers of the old "kings".

dominant political role of Mogmog, which it resents in view of its own growing importance as the locale of the high school, the radio station, the air strip, and so on. Yet, it is the function rather than the purpose of the taboos that interests us, and that function is obviously to help conserve green turtles.

INCREASING ENDANGERMENT

Such threats as the preceding to the preservation of the green turtle in the Caroline Islands are not entirely due to the abrogation of taboos, but all of them do result from the consequences of a changing world. Among these are the increased speed of native canoes, whose old cumbersome pandanus sails have been replaced with cotton or dacron ones, making more frequent trips to nesting islands possible (Gladwin 1970: 123-124; McCoy 1974: 217). Speed has also been greatly increased through the use of such tools as iron adzes and planes instead of shell tools, making it possible to improve greatly the smoothness of the hulls and thereby decrease resistance to water. On Puluwat atoll, it has been observed, the shaping and smoothing of canoes was greatly accelerated when the taboos and rituals associated with canoe-building were abandoned and the basic skills were opened up to everyone, allowing many more men to devote their time to the processes (Gladwin 1970: 124). This trend is to be seen in other islands, too, and is undoubtedly universal. But an even greater threat is the increasing use of motor-driven boats, which are irrevocably displacing the slower and less capacious sail canoes traditionally used to journey to nesting islands and to reach chelonians mating in the water, where they are almost oblivious to hunters (cf. McCoy 1974: 217). A serious concomitant of this is the chasing and spearing of turtles with detachable head harpoons, as now practiced for example by the people of Lamotrek, Elato, and Truk (McCoy 1974: 211). Still another threat comes from the spectacular rise in population everywhere. But perhaps the main danger to the green turtle lies in the decline of the restraining power of myth and ritual in the harvesting, killing, and distribution of the chelonian.

Recognition of the danger to sea turtles is reflected in Chapter 12 E of the Code of the Trust Territory of the Pacific Islands, where limitations on the killing of the hawksbill and other sea turtles, and the gathering of their eggs, is specified (Trust Territory 1961: Appendix C).

However, in two recent personal communications to me, Mike A. McCoy, District Fisheries Officer for Yap, states that these regulations are completely ineffectual and unenforceable, and must be replaced by the dissemination of information, as well as the building of turtle hatcheries, with which he already has had some experience. He is wholly cognizant of the recent revolt on Ulithi and has lobbied against a change there in the traditional turtle bans, which he recognizes as having been an effective buffer with the environment. But he realizes, as I do, that

the old culture cannot continue to prevent over-exploitation in the Trust Territory, not only of the green turtle but other marine resources as well.

Awareness of the threat to the green turtle is also seen in the current proposal by several federal agencies of the American government that *Chelonia mydas*, along with the loggerhead and Pacific ridley, be added to the U.S. List of Threatened Wildlife. The leatherback, hawksbill, and Atlantic ridley are already on the list.

No practical program has been drafted to replace the traditional attitudes of Carolinians towards the green turtle. It is customary in some quarters to deprecate tradition, but there can be little doubt that in places such as Ulithi the harvesting of *Chelonia mydas* has been held in check by traditionalists, who, regardless of their motives, have functioned as effective conservationists. As long as they continue to live, the smoldering values of the pagan past will come to the surface when faced by threats to established political authority. But the complete erosion of these values is inevitable, and when tenacious men such as Tahachilibwe and Hathilul are no longer on the scene, the restraining role of the sacred interdicts will disappear. It is a challenge to their younger successors to find means to replace the old myths and practices with effective substitutes. Let us hope that they can be at least half as successful as their pagan-bred predecessors.

REFERENCES

- Bentzen, C. (1949): Land and Livelihood on Mokil, An Atoll in the Eastern Carolines. Pacific Science Board, Coordinated Investigation of Micronesian Anthropology, Report No. 25, Part 2 (dittoed).
- Bolling, L. (1927): Die Bewohner der Truk-Inseln *Anthropos Ethnologische Bibliothek*, III, i. Münster, Aschendorff.
- Damm, H. et al. (1938): Zentralkarolinen, Part II (Ifaluk, Aurepik, Faraulip, Sorol, Mogemog). In: Thilenius, G. (ed.): *Ergebnisse der Südsee-Expedition 1908-1910*, II, B, X, ii. Hamburg, Friederichsen, De Gruyter and Co.
- Eilers, A. (1935): Westkarolinen (Songosor, Pur, Merir). In: Thilenius, G. (ed.): *Ergebnisse der Südsee-Expedition 1908-1910*, II, B, IX, i. Hamburg, Friederichsen.
- Eilers, A. (1936): Westkarolinen (Tobi, Ngulu). In: Thilenius, G. (ed.): *Ergebnisse der Südsee-Expedition 1908-1910*, II, B, IX, ii. Hamburg, Friederichsen, De Gruyter and Co.
- Gladwin, T. (1970): *East Is a Big Bird: Navigation and Logic on Puluwat Atoll*. Cambridge, Mass: Harvard University Press.
- LeBar, F. M. (1964): The material culture of Truk. *Yale University Publications in Anthropology*, No. 68. New Haven, Department of Anthropology, Yale University.
- Lessa, W. A. (1950): Ulithi and the Outer Native World. *American Anthropologist* 52, 27-52.
- Lessa, W. A. (1959): Divining from knots in the Carolines. *Journal of the Polynesian Society* 68, 188-204.
- Lessa, W. A. (1961): Tales from Ulithi Atoll. University of California Publications. *Folklore Studies*, No. 13. Berkeley and Los Angeles, University of California Press.
- Lessa, W. A. (1962): The decreasing power of myth on Ulithi. *Journal of American Folklore* 75, 153-159.
- Lessa, W. A. (1966): *Ulithi: A Micronesian Design for Living*. New York, Holt, Rinehart and Winston.

- Lessa, W. A. (1976): The Apotheosis of Marespa. In: Kaeppler, A. L. and Nimmo, H. A. (eds): *Directions in Pacific Traditional Literature: Essays in Honor of Katharine Luomala*. Honolulu, Bishop Museum Press.
- McCoy, M. A. (1974): Man and turtle in the Central Carolines. *Micronesia* 10, 207-221.
- Sarfert, E. (1919): Kusae. In Thilenius, G. (ed.): *Ergebnisse der Südsee-Expedition 1908-1910*, II, B, IV, 2 vols. Hamburg, Friederichsen.
- Trust Territory of the Pacific Islands, Office of the Staff Anthropologist (1961): Notes on the Present Regulations and Practices of Harvesting Sea Turtles and Sea Turtle Eggs in the Trust Territory of the Pacific Islands. *Anthropological Working Papers*, No. 1, 2nd ed., Guam: Trust Territory of the Pacific Islands.