

THE TERRIBLE SOLOMONS

ANDREI SOURAKOV

Dept. of Entomology & Nematology, Univ. of Florida, Gainesville, Florida 32611

"There is no gainsaying that the Solomons are a hard-bitten bunch of islands. On the other hand, there are worse places in the world. But to the new chum who has no constitutional understanding of men and life in the rough, the Solomons indeed prove terrible.

It is true that fever and dysentery are perpetually on the walk-about, that loathsome skin diseases are abound, that the air is saturated with a poison that cuts into every pore, cut or abrasion and plants malignant ulcers. . . . It is also true that the natives of the Solomons are a wild lot, with a heavy appetite for human flesh and a fad for collecting human heads... Heads are a medium of exchange and white heads are extremely valuable."

Jack London, 1908: *"The Terrible Solomons"*

In Honiara, the capital, the heavy automobile traffic began early in the morning, despite the fact that nowhere seemed too far to walk. Internet services and international phone calls were readily available. Craft museum and souvenir stores in front of the hotel indicated that tourists are not a rarity here either.

On Guadalcanal Island, outside Honiara, only secondary growth forest and palm plantations were within easy reach. Later our group of Lepidopterists from United States flew to another island of New Georgia in the west of the archipelago, from where we took small motor boats to other islands over rough at times sea.

One morning, we got off the boat at the Kohinggo Island and carefully, not to cut our feet on the sharp coral bottom, made the way ashore. While I stayed next to the boat, the rest of the group toured an American tank, left in the jungle since the World War II. Hiding in the palm shade from the burning sun, there sat an old man, watching the sea. A freshly carved dugout laid at his feet, and at the back stood a grass-roofed hut, where the old man's wife played with their grandkids.

I sat down next to the old man, after greeting him, to which he replied in perfect English. In a few minutes I decided to break the silence.

"What a good life you have here! Sea full of fish, coconuts over your head, weather is always warm."

"Yes. It's nice here. People of Solomons are peaceful. Not like in Papua or Indonesia, where they are always fighting. . . . One thing could be better, though. I could use more money."

"What would you do with the money, should you have it?" I asked.

"Sugar, for example. It's expensive."

What a modest wish! "The timber companies are logging everywhere, and on your island too. Haven't they paid you for the forest they took?"

"Yes, they have, . . . a bit."

"Well, how much, forgive my curiosity?" *Surely, it should be enough for sugar.*

"The price of wood on the world market has been low lately," said the old man thoughtfully, as if reading out of a newspaper. "I sold six steamers for a little over two million American dollars."

I, naturally, inquired of the whereabouts of these millions, which wherever they were, were not heavily invested into the man's household.

"In the bank, in Honiara" explained the barefooted million-

aire.

I hardly thought of the conversation with the old man until the end of the trip. I was sure that I met a nice, but slightly confused soul. Back in Honiara, however, I spoke of my conversation with Tobias Lobaseni, an employee of the Solomon Island Development Trust, the organization concerned with a diversity of educational programs in the villages: from birth control and domestic violence prevention, to introduction of modern agricultural practices.

Tobias told me that what I heard from the old man was likely to be true, and in fact is not uncommon. The land in the Solomons is divided between numerous clans that populate this 922-island archipelago. The old man is probably the head of his clan, so he received the money for the timber. The islanders indeed often don't spend the money, because they have not developed a habit for shopping, so typical of the Western societies. Logging has started relatively recently, and before that, little money came their way. "On the other hand," added Tobias, "local people think that by saving money they are being wise. The forest is gone and it will take generations for it to grow back. Actually, it might never grow back, as the logging companies do no reforestation, so the soil might simply erode away. Hence, the timber money, elders think, will support the future generations: the penny saved is a penny earned."

Tobias and his co-workers take to heart the devastation of nature brought to their country by commercial logging. Through their work in the Trust they try to introduce sustainable forest utilization to remote villages. For instance, Tobias' program is aimed at establishing farming and export of rare butterfly species, of which the giant Birdwings are highly valued by the collectors for their bright colors and size. Tobias hopes that families introduced to butterfly ranching will abandon their slash-and-burn agriculture, saving the forest around their houses. Through him, our group met several of his trainees and visited their butterfly ranches, hoping to finally see the famous insects.

Ranching requires very little effort and no initial investment. Female butterflies from the surrounding forest lay eggs on their respective host plants. Birdwings, for example, feed on the pipevine, *Aristolochia tagala*, which readily grows out in the open, when the seeds distributed by Tobias are planted next to the ranchers' homes. Adult butterflies are attracted to the hibiscus flowers commonly decorating the villages, to feed on nectar. Caterpillars are allowed to feed and pupate freely, while pupae are collected and brought inside the house.

No cages are used to hold the emerged butterflies or to keep the ants and parasitic wasps away – ranchers usually do not have money



Fig. 1-2. Life stages of birdwings: 1) *Ornithoptera victoriae* (Gray) (top, left to right): egg (top) to caterpillar (detail shows head region and osmeterium, center), to adult male (right); 2) *Ornithoptera priamus urvillianus* (Guerin-Ménéville): last instar caterpillar (lower left), adult male (side view), and adult male (dorsal view).



Fig. 3. Top (left to right) *Ornithoptera victoriae*: pupa (left); harvested pupae attached to ceiling of butterfly rancher's home (center); box of beetles for sale (right). Lower set: hunters after fish by a coral lagoon (left); family members of butterfly rancher (center); view of islands among the Solomons (right).



Fig. 4. Solomons scenes (top to bottom): giant Araceae in Guadalcanal jungle (left); old man, Kohingo Is. (bottom left); village kids, Malaita Is. (top center); cicada attacked by mold (bottom center); day-flying moths on tree heliotrope (top right); *Asota* moth (Noctuidae) (center right); village kids, Malaita Is. (bottom right).

Fig. 5. Butterflies of the Solomons (below, left to right): *Argyronympha gracilipes* Jordan, *Hypochrysops constancea* d'Abrera, *Luthrodes cleotas* (Guerin-Ménéville).



to buy these much-needed supplies. Instead, they wait for a pupa to turn dark, and then watch it closely until the butterfly emerges. The pupae often fall prey to lizards and ants. However, the ranchers' main problem is not raising the butterflies, but marketing them. Lacking refrigerators, ranchers store butterflies in plastic boxes. This protects the specimens from ants, but not from humidity. Mold makes stockpiling the specimens difficult, so the butterfly trade is usually conducted in fresh specimens, raised to meet an immediate demand.

The specimens are sold to a middleman in Honiara, who accumulates a sufficient number of butterflies to fulfill an order from a Western dealer. To pay for postage and for export permits, the price of butterflies has to be quadrupled from what was paid to a rancher, the minimum order also has to exceed \$800. The most expensive species, *Ornithoptera victoriae* (Gray), is sold for only \$40 a pair, a fraction of its actual price in the developed world. The export permit and shipping costs, as well as a lack of coordination between the farmers and the dealers, keep the price of the butterflies very low, and the market is easily flooded. With some coordination brought into the program, the Western dealers can be easily bypassed, and the program would become more economically viable. The farmers could then receive a fairer percentage of the trade, rather than the scraps as they do today.

People of the islands of Oceania settled the area 30,000 years ago, so there is not a single island in the Solomons, whose flora and

fauna has not been heavily affected by the human interference. As the archeological digs of the campsites of the first settlers show, even the smallest islands had many of their native bird species wiped out. Boats and divers tramp upon the coral reefs, while the exotic plants and animals, such as rats, dogs, and pigs further the extinction of native species. Due to the introduction of powerful tools, the footprint of every man on the islands today is increasing exponentially. So does the human population, which reached 378,000 in 1995.

At the same time, biodiversity is yet to become viewed as an asset, potentially as valuable as timber. And sadly, the sign, hanging at the office of the Solomon Island Development Trust, might come true for the islanders sooner rather than later. This sign says: "Only when all the forest is cut, all fish is caught, and all rivers are polluted, only then will one discover that the money can not be eaten."

The butterfly fauna of the Solomons is first of all known for its most spectacular representatives: the Birdwings. The articles presented here concern less showy but nevertheless interesting genera. As the archipelago consists of almost a thousand different islands, it is a perfect site for allopatric speciation of animal populations isolated by water. The present papers illustrate, that an insightful look at these populations can reveal previously unrecorded morphological diversity.



Fig. 6. Village farm, Solomons (© 2001 A. Sourakov).