Relearning Traditional Knowledge for Sustainability: Honey Gathering in the Miombo Woodland of Northern Mozambique

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Overview

Mozambique's Niassa Reserve contains Africa's best preserved miombo woodland. A survey in 12 settlements found that 47% of households gather wild honey from natural hives, their most important option for obtaining cash. Most collectors used destructive techniques: setting fire to the grasses under the hive tree to create smoke and then felling the tree to remove the honeycombs. A honey hunter may set multiple fires and fell 5-6 trees each day. These anthropogenic fires spread, affecting not only bee colonies, but also other wildlife and even homes and fields, as well as impeding regeneration of some tree species. Cutting trees to obtain honey was the principal source of tree mortality, and trees large enough to host bee hives were determined to be approximately 200 years old. A few people in the reserve had learned from earlier generations how to gather honey in a nondestructive way, using plants to keep bees from stinging and climbing the trees using ropes to take the honeycombs out of the hives. When this traditional knowledge was shared, honey hunters were glad to adopt these techniques. Doing so made honey harvesting less laborious, more sustainable and compatible with the conservation of the woodlands and its species.

1. Documenting the destructive impact of honey harvesting

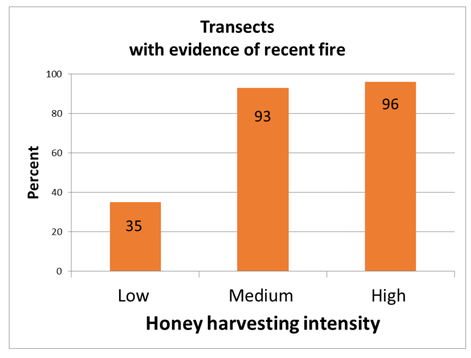
In plots on 63 transects in intensively, medium and less-used honey harvesting areas, trees and stumps of 11 tree species important to bees were identified and causes of damage and mortality determined.

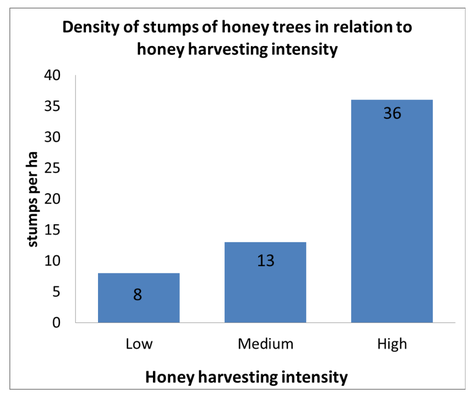
2. Sharing results with honey harvesters

Results that quantified the negative consequences of tree felling and burning were shared with honey hunters, who acknowledged the problem of diminishing bee hives. resulting from destructive practices.

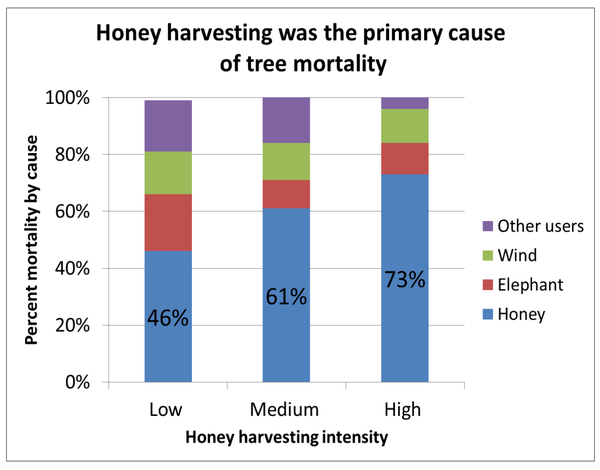
3. Promoting nondestructive practices

- A honey hunter who knew the traditional ways was sent to an international conference on honey gathering. Sharing his knowledge with others contributed to his recognition of its importance.
- The expert honey hunter told others about traditional ways to use protective plants and tree climbing instead of fire and felling to obtain honey, and demonstrated them.
- A year later, honey hunters reported having adopted these methods because they were less laborious and allowed repeated harvests from the same tree. The honey was better, too, not tainted with smoke. They said these techniques had not previously been shared by others.






This honey hive tree grew 200 years to reach this size.



Steps for Sustainable Honey Harvest: Collect the plants, mash them and spread on skin and around the hive; make a climbing rope; create a smoke torch ('Ntomonhi' *Diplorhynchus condylocarpum*) and lay it on cleared ground; climb the tree, collect the honey and let it down in a bucket, leaving the larvae to sustain the hive. Climb down the tree and extinguish the smoke torch.

Plants for quieting bees


Nacaute (*Steganotaenia araliacea*)

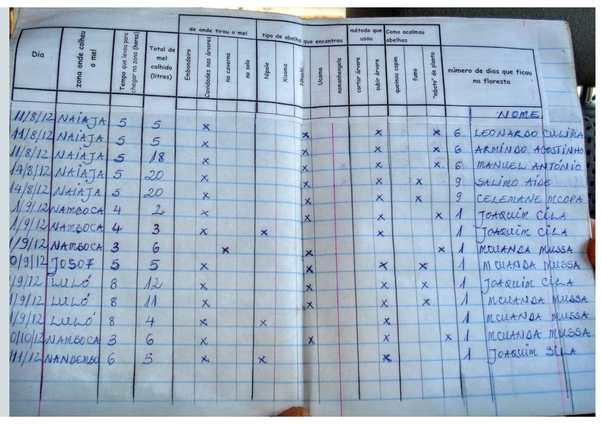

Namalunga pequeno (*Rhoicissus digitate*)


Namalunga grande (*Ampelocissus obtusata*)

Photos by Bioversity International/Laura Snook

Monitors documented that honey hunters were using the newly-learned, nondestructive, traditional practices.

Thus knowledge sharing was revealed to contribute to more sustainable forest use and management.



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