

HONEYBEES CYBERTRACKED!

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Honeybees are pollinators of a large number of plants and are therefore major contributors to ecosystem maintenance. Given the introduction of potentially threatening honeybee parasites (photo 7) in the country by beekeepers, there is a need to



evaluate the natural density of colonies in the wild. Indeed, it is necessary to know how many colonies are out there before the impact of human activities on the bees and the ecosystems they sustain can be assessed. Finding honeybees nests in the field is very challenging given their low density. Honeybees often nest high in trees and one can hear

them flying en masse around the entrance before one sees them. They only slightly alter the hole they use as an entrance by



coating it with propolis (photo 1, 2), so the nests are not

conspicuous. This difficulty represented a problem for our population genetics project aimed at determining honeybee density in the park, for which we needed to sample bees from a large number of colonies. One approach to overcoming this problem, was to place 300 trap boxes throughout the park in an attempt to attract swarms to know

locations. Unfortunately, bees favoured natural nest sites and few swarms settled in our man made shelters.



The second approach was to take advantage of the numerous field rangers who patrol the park on a daily basis. Their observations represent a mine of information that would be impossible for researchers to gather during a few weeks of fieldwork. The CyberTracker system allows the rangers to record the GPS position of their observations that are then



centralized at the scientific services and made available to the researchers. All that is left for us to do, is to locate the position recorded by the ranger (photo 3).



Thus, since the CyberTracker has been in use, it has allowed us to collect samples from an increasing number of natural nests. We started using the CyberTracker information in October 2004 and have used it in our field work since then. Thanks to the rangers' work, we could sample 1, 4, 6 and 13 colonies on our successive fieldtrips (photo 4, 5), in addition to the 16, 10, 13 and 23 swarms that moved in our boxes (photo 6), therefore contributing significantly to the success of our project.