

Size of Traditional Beehives

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The size of a beehive is important for the good development of the bees inside it. In order to find out the appropriate hive size for unselected native bees in Nepal, traditional beehives from different places were measured.

Method

The size of traditional Nepalese log hives and wall hives for *Apis cerana* were measured (Figs 1 and 2). For comparison, traditional hives for *Apis mellifera* were also measured in Europe (Figs 3–5) and North Africa (Figs 6 and 7). The volume for all hives was calculated in litres. Location, bee species and number of hives measured were also recorded.

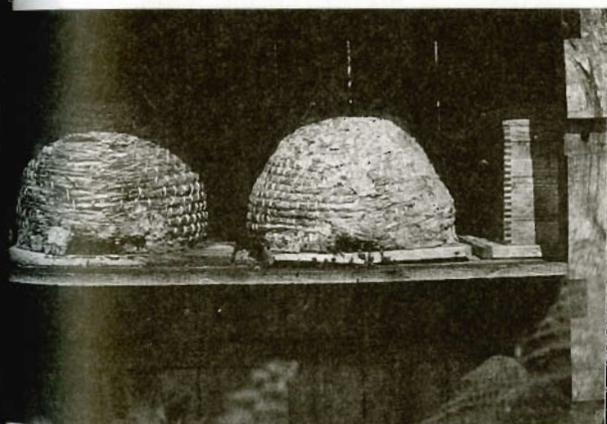
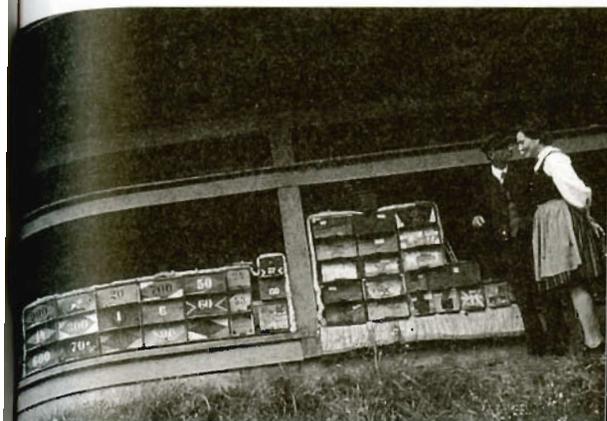
Results and Discussion

The results are shown in Table 1.

The volume of traditional beehives is more or less the same for *A. cerana* and *A. mellifera*. Only the basket log hive in Morocco (*A. m. intermissa*) is significantly smaller than the others. Today such traditional hives are much too small for selected *A. m. carnica*. This bee needs hives with a volume of more than 100 l. It is only a question of effective selection: in time, *A. cerana* might also need the same large-sized hive as *A. mellifera* today.



Figs 1 and 2. Typical log hive and wall hive in Nepal



Figs 3 to 5. Traditional log hives in Austria, Europe
 Kaerntner Bauernkasten (Fig. 3)
 Rauchfangstock (chimney hive; Fig. 4)
 Strohkorb (traditional straw hive; Fig. 5)



Figs 6 and 7. Traditional hives in Morocco, North Africa:
 Ferula log hive (top) and basket log hive (bottom).

Table 1. Volume of hive types from *Apis cerana* and *Apis mellifera*

Area	Hive type	Bee species	No. of hives measured	Volume (l)
Nepal	Wooden log hives	<i>A. cerana</i>	120	38.8 ± 14.2
Nepal	Wall hives	<i>A. cerana</i>	19	38.7 ± 9.1
Austria	Diff. types (straw, log, etc.)	<i>A.m. carnica</i>	21	29.0 ± 12.3
Morocco	Log hives (Ferula)	<i>A.m. intermissa</i>	6	30.7 ± 6.7
Morocco	Log hives (basket)	<i>A.m. intermissa</i>	10	20.2 ± 4.1