Supporting Information

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Fig. S1. GPS/radiotelemetry pack placed on the back of an Egyptian fruit bat (*R. aegyptiacus*). Photo taken at the moment of release. Photo credit: A. Tsoar. *Inset*: GPS datalogger without the radiotelemetry unit and the protective casing.



Fig. 52. Very straight commuting flights by the same bat shown in Fig. 1A (bat 125). The bat left the cave, flew locally (light gray line), then took a long commuting flight (black line) to the feeding trees and then commuted back to the cave (dark gray line). Superimposed on an aerial photo of the area, taken from Google Earth.

Flight back to cave



Fig. S3. Population data shows commuting flights that started or ended directly at the cave. Colors represent the long commuting flight to the feeding tree (black) or back to the cave (dark gray). Superimposed on an aerial photo of the area, taken from Google Earth. Same data as in Fig. 1C. Note the very straight commuting flights from the cave and back to the cave.





Fig. 54. Flight path to the foraging area of bat 102 (*A*) and bat 136 (*B*): these bats ignored all the plantations and individual trees of the same species on their way (*M. alba* and *Ficus microcarpa* trees, respectively). Conspecific trees and plantations are denoted here by yellow dots; note that these yellow dots correspond to the conspecific trees we were able to locate, and hence they represent a conservative estimate of all these trees in the area—the complete set of conspecific trees is certainly larger than this. Black line indicates flight trajectory superimposed on an aerial photo of the area, taken from Google Earth. These examples suggest that the bats did not use olfactory beaconing toward a specific tree to find their favored trees.



Fig. S5. Bats released at site R1 early in the night and not fed by the experimenters flew to feed at a favored tree, and then returned to the same individual tree night after night. Shown is a close-up of the foraging of a translocated bat returning to the same foraging tree on three consecutive nights (*A*, bat 230; *B*, bat 160). These are the same bats as in Fig. 2 C and D. Superimposed on an aerial photo of the area from Google Earth; different colors represent different consecutive nights.



Fig. S6. Maps of four magnetic parameters show very small differences in the magnetic field between release sites R2 and R3. *F*, magnetic field vector; *H*, horizontal projection of *F*; *D*, declination; *I*, inclination. All four release sites that were used in our experiments (cave, R1, R2, and R3) are marked as well. Black contour represents national borders. Data courtesy of B. Shirman (1).

1. Shirman B (2000) Three component magnetic anomaly maps of Israel. Isr J Earth Sci 49:1-7.



Movie S1. Foraging flight of bat #146 from the cave to the first feeding tree. Note the very straight flight to the feeding-tree, and then the long bout of foraging at the tree.

Movie S1