

SOME RESULTS FROM ECOLOGICAL STUDIES
AT THE RIO BRAVO CONSERVATION AND
MANAGEMENT AREA, BELIZE

Nicholas V. L. Brokaw and Elizabeth P. Mallory

Manomet Bird Observatory
and
Programme for Belize

January 1992
(Partially Revised, June 1992)

BIRD STUDIES

Birds are being studied in six habitats at Rio Bravo, using both mist-netting and censusing (systematic sight and sound observations). Bird studies have been carried out from August 1990 through May 1992. Mist netting has entailed 71 sessions (2— 3 days each), resulting in 5,114 different individual birds captured, and 6,600 total captures, including recaptured individuals. These have included over 150 species. Of the individuals captured 22.5 % were migrants (breed in North America, winter in the tropics).

Netting effort has been equal among sites. The habitats include upland dry forest, upland mesic (moist) forest, palm forest, riparian (riverside) forest, young second growth (milpa), old second growth.

PLANT STUDIES

Plant phenology and resources for animals — Graph on following two pages show seasonal variation in abundance of flowers and fruits, which are food resources for animals. Two other habitats are also being monitored, in studies continuing through May 1992.

TREE SPECIES COMPOSITION

The species composition, population dynamics, and growth of trees are being studied in one hectare plots in each of four habitats at Rio Bravo. All trees in each plot > 10 centimeters diameter at 137 centimeters above ground are identified, measured, mapped, and permanently tagged. Follow up measurements will be made in future years to record mortality, recruitment, and growth.

On the following page is a graph showing the number of species in different abundance classes in the riparian forest plot. There were 378 trees 10 centimeters diameter in the plot, representing 56 species.