## XI. ACCESS TO THE CROWN OF CANOPY TREES

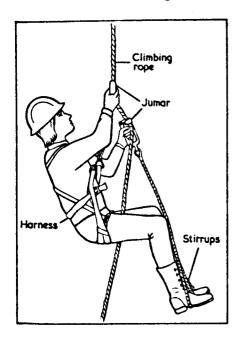
Many botanists collecting in the tropical rainforest face the problem of collecting from the often very tall canopy trees. Not always will tree climbers be available and even if they are they cannot always climb all trees, especially after a rain, or when lianas or nearby smaller trees are absent.

A method was designed by Donald R. Perry (Biotropica 10, 1978, 155-157) and later discussed by Dr. E. Torquebiau (BIOTROP) who drew my attention to this method and used it himself.

A crossbow is used; we bought a Barnett with 175 lbs draw, which, by the way, is used in a James Bond film for approximately the same purposes. Attached to its underside is a Mitchell-498 seafishing reel with a 50/100 nylon line which is tied through a hole in the aft of an arrow. Arrows consist of aluminum tubing filled with lead whereby they are heavy enough to fall back to the ground pulling the line with them. Once the line has been lodged over a sufficiently thick branch, a second line, either an intermediary one of strong twisted nylon, or the final climbing rope may be attached to it and pulled over the branch.

## Caution:

- a. Make your knots yourself and know them well!
- b. Before climbing up hang on with several people and be prepared to run — fast! Branches may look deceptively thick and will be more brittle than you think!



The climbing rope should be of a type used in caves, 8.5+ mm Ø, which is of the static type characterised by low elasticity. For climbing a pair of jumars (ascenders) are used, one of which is attached to a climbing harness, the other to a pair of footslings or stirrups (see figure). Climbing this way is not only easy, but also completely safe. For an easy descent a security 'stop' self-locking descender can be used.

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Harness arrangement for Free Climb method. After D.R. Perry, Biotropica 10 (1978) 155-157.