

AUSTRALIAN BIODIVERSITY AND ABORIGINAL BURNING



Hunting with Fire: Women, Foraging and the Ecosystem



Researchers and students from the University of Maine are conducting the first large-scale investigation of the relationship between the contemporary subsistence, burning strategies, and biodiversity among Mardu Aborigines in the Western Desert. A large complement of Australia's ecological web has changed dramatically over the last 200 years. Today, biodiversity in some of the world's most expansive and sensitive deserts is critically threatened, especially as a result of changing fire regimes.

The Desert Mosaic

For thousands of years, desert Aborigines have set fire to the arid savanna, creating an environmental patchwork to which much of the desert plants and animals are specifically adapted. Where Aborigines have been removed from their lands, the desert patchwork has often been obliterated with devastatingly large wildfires.

A New Approach to Fire and Land Management

Biodiversity in Australia is a product of a very long and dynamic relationship between people and the physical environment. Understanding this relationship will be critical for dealing with ecological catastrophes that can result with abrupt changes in fire and climate. This research demonstrates that a mosaic of plant and animal communities is maintained through Mardu women's traditional hunting activities that involve burning large patches of desert savanna. Effective fire and land management in this region of the Western Desert will fail along most fronts without incorporating Aboriginal participation and objectives.



Selected References

Bird, D.W., R. Bliege Bird, C.H. Parker, and B. Bass (submitted manuscript). Aboriginal burning regimes and hunting strategies in Australia's Western Desert. *Human Ecology*.

Bird, D.W. and R. Bliege Bird (2003). Mardu children's hunting strategies in the Western Desert, Australia. In *Culture, Ecology and Psychology of Hunter-Gatherer Children*, B.S. Hewlett and M.E. Lamb (eds), New York: Aldine de Gruyter (in press).

Bird, D.W. and R. Bliege Bird (2003). Evolutionary and ecological understandings of the economics of desert societies: comparing the Great Basin USA and the Australian Deserts. In *Desert Peoples*, P.M. Veth and M. Smith (eds), London: Blackwell Scientific (in press).

Bliege Bird, R., D.W. Bird (2003). Human hunting seasonality: a case from Australia. In *Primate Seasonality*, ed. D. Brockman and C. van Shaik, Cambridge University Press (in press).

Latz, P. (1995). *Bushfires and Bushtucker: Aboriginal Plant Use in Central Australia*. Alice Springs: IAD Press.

Tonkinson, R. (1991). *The Mardu Aborigines: Living the Dream in Australia's Desert*. New York: Holt, Rhinehart and Winston.