Center for Community-Based Resource Management (CBRM)

Natural Resources Institute, University of Manitoba

CBRM Database

Date:	August 8, 2012	Entry Number:	1225
Case Study Name:		**When lessons from population models and local ecological knowledge coincide – Effects of flower stalk harvesting in the Brazilian savanna**	
Author:		Schmidt, I.B. and Ticktin, T.	
Document Type:		Paper in scientific journal	
Year:		2012	
Language:		English	
Document Location:		Biological Conservation 152:187–195.	
Full Citation:		Schmidt, I.B. and Ticktin, T. 2012. When lessons from population models and local ecological knowledge coincide – Effects of flower stalk harvesting in the Brazilian savanna. Biological Conservation 152:187–195.	
Region:		Latin America and the Caribbean	
Country:		Brazil	
Ecosystem Type:		Grassland, savanna	
Social Characteristics:		Community inside protected area/community bordering protected area	
Scale of Study:		Regional	
Resource Type:		Non timber forest product, Biodiversity conservation	
Type of Initiative:		Research-driven project, community initiative	
Community Based Work:		Resource management, conservation	

Keywords:	Policy, Management, Handicrafts, Wet grasslands, Fire, Cerrado, Jalapão, Sustainable use
Summary:	**Sustainable harvest of non-timber forest products (NTFPs) can play an important role in biodiversity conservation and livelihoods. However, harvesting policy intended to promote conservation are frequently either ineffective or too complicated. Successful policies should consider ecological impacts, local ecological knowledge and management practices, but NTFP policies are rarely based on these elements. Syngonanthus nitens (Eriocaulaceae, 'golden-grass') is one of the most valuable NTFPs from the Brazilian savanna. The handicrafts made from this species' flower stalks are traditional to the Jalapão region, Tocantins state, but have expanded over a much larger area in recent years. We combined ethnoecological interviews, seed phenology surveys over a large geographical area and harvest experiments in nine sites over 3 years to assess local ecological knowledge and management of golden-grass and its long-term effects on population dynamics. Although handicrafting activities are rapidly expanding, local ecological knowledge associated with harvest or management has not been transferred or created outside of Jalapão. Matrix population models illustrate that harvest according to traditional management practices had no impact on golden-grass population dynamics. Earlier harvest of golden-grass, as practiced by new artisans, leads to population decline due to plant uprooting. Local policies for golden-grass harvest are consistent with traditional management, limit the timing but not the quantity of harvest, and are appropriate over a wide geographical scale. Golden-grass and other wild harvested species with similar characteristics hold high potential to help conserve threatened habitat.**