If not claimed within 14 days please return to the Alice Springs Field Naturalists Club Inc. PO Box 8663, Alice Springs, NT 0871

June 2003

ALICE SPRINGS FIELD NATURALISTS CLUB

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Alice Springs Field Naturalists Club

June 2003

CLUB NEWS

NEXT MEETINGS

Wed June 11th, 7.30pm: Don Langford on History of the National Mala Project. OLSH staffroom.

TRIPS

Sat May 31st, Ormiston Gorge, Mound Springs. Meet at 7.30am at Flynn's grave parking area. Either return to Alice Springs or camp at 2 Mile (near Glen Helen) overnight. Numbers may be limited, preference for members. Bring lunch, hat, water. Walking short distance approx. 100-200m.

June 8th and 9th, overnight walk, stage 2 of Larapinta Trail, west from Simpson Gap. Leader Kaye Percy. Ph 8952 3405.

Sat June 14th. Spencer Hill at sunrise. Meet 6:30am at the Giles Street playground. Gloves and balaclava recommended. Leader Rosalie Breen. Ph 8952 3409.

Sun June 15th, N'Dhala Gorge. Meet am in front of the Date Farm at Palm Court. 200 km return by road, 4WD needed. About 3 km return of moderate walking.

Sun Jun 22nd, Waterwatch with Rosalie Breen. Meet 8:30am at the Sargent Street **sign**.

Sat July 12th. Stuart Pass Birthday Waterhole area. Bring hat, lunch and water. 4WD needed. Amount of walking may be varied to suit participants.

August 2nd to 4th, overnight (or 2 night) walk on Stage 4 of the Larapinta Trail, Simpsons Gap to Birthday Waterhole.

For further information on any of the above, contact Bob Read 8952 1935.

KINDRED ORGANISATIONS' ACTIVITIES & EVENTS

Please confirm details with the organisations listed.

Dates	Activities	Venues / Contacts
Wed. June 4th, 7.30pm	Aust. Plants Soc. (APS) monthly meeting: Guest speaker – Bill Peachey on Mulch. Followed by supper.	at Botanic Gardens Ph. 8952 5229
Wed 11 June, 5pm	APS planning meeting	at Botanic Gardens Ph. 8952 5229

Reminder: Comments on the FN Constitution to Pat Gallagher ASAP.

Twitchers

Someone recently asked me what a twitcher was. This story from Terry Pacey of the Gold Coast illustrates the single-mindedness and fanaticism of some wealthy twitchers in pursuing a tick for another species.

"This story was told by a very well known bird guide in North Queensland.

The birder involved travelled from the USA to see a particular species. On his arrival, the guide proceeded to drive for almost 40 hours to reach the area. As they drove along a track, a bird was seen to fly to a dead tree about 100 metres away. The guide checked it out and could hardly believe it when it happened to be the desired species. He told the visitor who immediately leapt from the vehicle, looked at the bird for all of 15 seconds, turned to the guide and said," I've seen it now. We can head back."

Apparently, the huge payment involved, and a huge tip, softened the blow of an 80 hour drive. Now that is a TWITCHER! We Australians have a lot to learn."

Bob Read

What the Australian Terrestrial Biodiversity Assessment Says About the Northern Territory

From the Australian Conservation Foundation press release.

Although the Northern Territory still contains some of the most intact natural areas in the country, big problems are looming as grazing impacts, changes to how fire is used in the landscape, feral animals, weeds and increasing land clearing take their toll...

Special values of NT ecosystems
The Northern Territory has the greatest length of rivers in largely unmodified condition, of any state or territory. (Table 3.1, p. 29)

"Most of Australia's natural bioregions are in the rangelands and tropical woodlands. Therefore, a coordinated Australia-wide approach to biodiversity conservation for these bioregions is imperative." (p. 151)

But bird species are beginning to decline
"...the reporting rate of ground-nesting [bird] species decreased ... particularly in south-eastern Australia, but also in the Top End of the Northern Territory." (p. 74)

"Even though human settlements are sparse in areas such as the tropical and sub-tropical savannas of northern Australia, and the intensity of pastoralism is relatively low, altered fire and grazing regimes have major impacts on bird species (p. 80)

And native mammals are also declining
"Several new insights have ... been identified through this study. In particular, the belief that the Top End of the Northern Territory and the North Kimberley are [refuges] for a range of mammal species appears to be misleading, as these regions are also experiencing declines in mammal species." (p. 84)

"Regions whose [mammal] faunas have been most susceptible to changes include: the arid and semi-arid regions of Northern Territory, South and Western Australia... (p. 87). The [mammal] species with range contractions are hare wallabies, nail-tailed wallabies, rat kangaroos, Numbat, bandicoots and large rodents ... All species had ranges centred on the continent's arid and semi-arid zone." (p. 89)

The key threats to NT's wildlife and bushlands

- "The major biodiversity issues across Australia [include]:

- Overgrazing in many parts of the pastoral zone;
- The widespread impact of feral animals in arid areas;
- Changed fire regimes in northern Australia ..." (p. 58)

"Pastoralism is the most pervasive factor affecting the [NT Mitchell Grass Downs] region's biodiversity, especially in chenopod shrublands (bluebush swamps) and mitchell grasslands. Partly accompanying pastoral management, the region's biota may also be affected by altered fire regimes." (p. 168)

"The apparent paradox of biodiversity loss within a superficially intact system is a recurring theme across much of remote Australia. The paradox is resolvable by recognition of the landscape-wide degradation of habitat quality due to impacts of feral animals, spread of weeds and altered fire regimes." (p. 163)

."... clearing threatens ecosystems near Darwin and is related to developments for horticulture and improved pastures." (p. 50)

Both the Daly Basin and the Gulf Coast regions of the NT are amongst the highest priorities in Australia for consolidation of the protected area system (Table 8.1, p. 122).

Bob Read

Dept. Infrastructure, Planning & Environment (DIPE) are selling the facsimile edition of the **"Report on the Work of the Horn Scientific Expedition"** for $55, a bargain price for 4 hardcover volumes. The books are the 1894 description of the zoology, botany, geology and anthropology of Central Australia.

Something to crow about: birds with tools of trade

By Roger Highfield, London

A remarkable colony of inventors has emerged on an isolated Pacific island. They can fashion tools out of materials scavenged from the rainforest. They can even customise a tool for a given job.

Early studies showed crows to be almost human-like in their use of tools, with technological features that match the stone and bone-tool cultures that emerged among primitive humans between 2.5 million and 70,000 BC.

But the anthropocentric still took solace from the fact that only humans were thought to have the brain power required for cumulative technological evolution. This is the skill for innovation that two million years ago took our ancestors from creating flakes of flint, for use in cutting, to honing knives, blades, arrowheads and axeheads.

Now this "unique" attribute of humans has also turned out to be a flattering delusion. A new study shows that the crows of New Caledonia are inventive. With their evolving leaf tools, the birds have levered man off his pedestal.

The creative skills of the birds are described this month in the Proceedings of the Royal Society by Dr Gavin Hunt and Dr Russell Gray, of the University of Auckland. They have spent the past decade studying feathered technology in the islands of Grande Terre and Mare in the South Pacific archipelago of New Caledonia.
After an intensive field survey of local crow industry - sampling 21 sites and 5550 leaf tools - the scientists found that the birds rip the barbed leaves of the pandanus (screw pine) tree to fashion three distinct types of tools for grub and insect extraction: wide, narrow and stepped.

Because the strap-like leaves are reinforced by tough parallel fibres, the latter tapered design is best made in steps. With precision beak work, the crow nips the leaf, then rips along the fibres. Next it makes another cut and tears again, repeating until it has a tool with usually two, three or four steps.

The scars on the remains of leaves used by the crows revealed similarities in the cutting and ripping used for each of the three basic tool designs, and their different but overlapping geographic distributions.

All the designs are found around Riviere Bleue, at the end of Grand Terre, suggesting that the first prototype leaf tool was invented there to winkle bugs out of crannies.

The ability of the birds to innovate is further shown by their making of other tools, such as hooks, and how they do not rely on one raw material: as well as pandanus, the birds make hooks out of twigs and similar materials. They often strip a twig of leaves, and sometimes of bark, and cut it off just below a shortened offshoot to create a hook to weedle out bugs.

Professor Alex Kacelnik, a fellow of Pembroke College, Oxford, praised the study as "extremely important". It complements his own research which has turned Betty the New Caledonian crow into a star by revealing her to be the first animal, other than man, to show a basic understanding of cause and effect.

Betty began making tools after her partner, an old male called Abel (now deceased), snatched away a hook made for her by the researchers, forcing her to make her own from garden wire to fish out morsels from a tube.

She wedged the end of the wire into the base of the food tube and turned her head to form the hook. What amazed the researchers was that she could even adapt her hooks if they were not up to the job, something that even chimpanzees were unable to do.

http://theage.com.au/text/articles/2003/03/27/1048653799744.htm
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