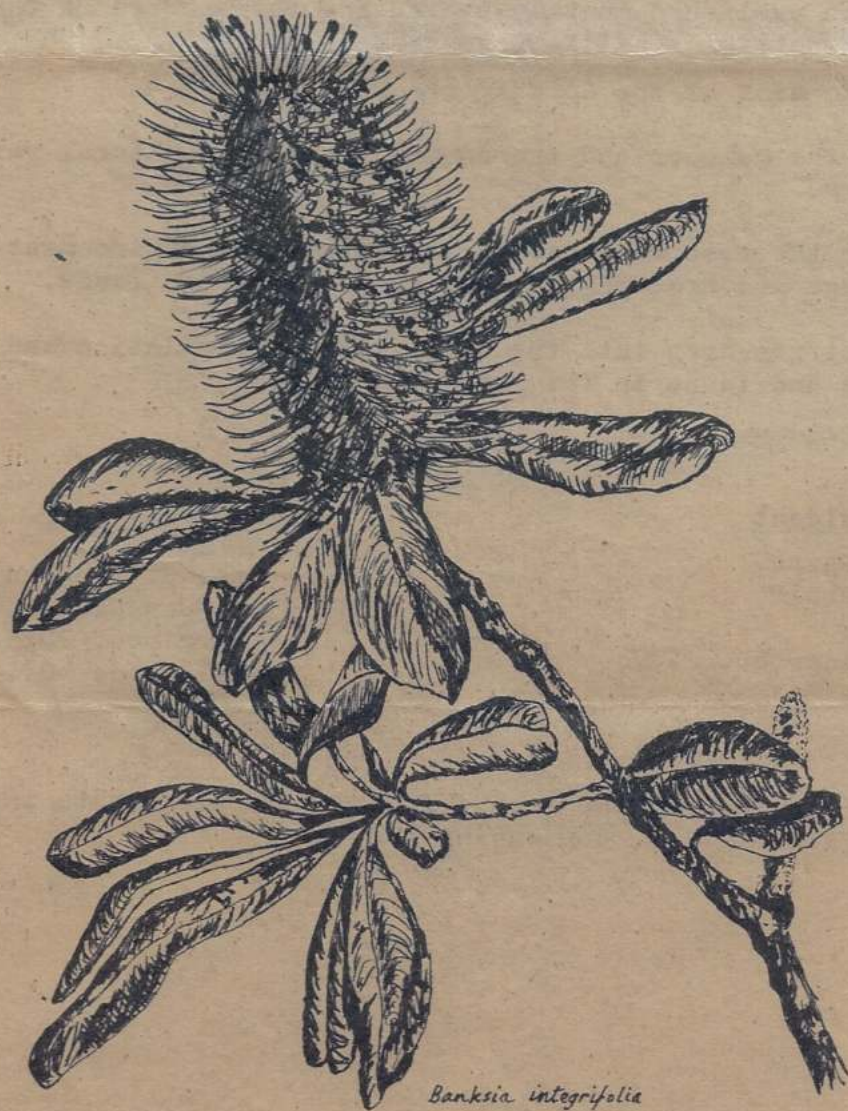


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KALORI

September 1969



Banksia integrifolia

Society
Conservation

Wildlife

Lower Blue Mountains

CONSERVE, PRESERVE, INVESTIGATE, EDUCATE.

Kalori is published monthly by and for the members of the Lower Blue Mountains Wildlife Conservation Society.

The aims of the Society are, briefly, to:-

1. Educate the members and the community to the cultural values of nature.
2. Work for the reservation of areas of natural environment for the refuge and breeding of indigenous flora and fauna.
3. Carry out research into the distribution, population and species of flora and fauna in the Blue Mountains.

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Meetings are held on the second Thursday of each month in the Springwood Fire Station, commencing 8.00 p.m.

Bulletin No. 28
September, 1969

Spring is here; the grass is ris, I wonder where the birdies is! Keith King knows, but he will know more if we report our sightings to him. Telephone Springwood 511034.

Last meeting was quiet: we resolved to contribute \$2.00 to the Myall Lakes National Park Committee to help defray the cost of their campaign; and \$5.00 to the Colong Committee to buy one share of Aust. Portland Cement.

The Blue Mountains National Park Trust has given us permission to carry out our surveys in the Park. This leaves the way clear to enlist the support of the Wildlife Service, very necessary since we will need a large number of properly made traps.

Articles in KALORI this month and in the last few months have been supplied by several members. We have not yet reached the stage where manuscripts are refused for lack of space, so if you have a literary itch, scratch it with a pen and we will publish you. If you dont agree with some other writers sentiments, write a counter article.

The fire protection policy of the Katoomba and Districts Wildlife Conservation Society is summarised in this issue. There is not space to publish it in full but you will notice that it complements our policy and indeed improves on it in regard to fire spotting, and the use of "second line" personnel in mopping up etc.

Whatever the problem we cannot solve it unless we get involved.

Next meeting 11th. September.

G Croghan
Hon. Sec.

THE MEDICINE MAN'S FIRST AID KIT.

by Muriel Biggs.

So few records have been kept of the drugs used by the Aborigines throughout the whole of Australia that L.J. Webb reported to the Royal Society of Queensland in 1959 "it is becoming increasingly difficult to locate authentic botanical material of plants used medicinally by the Aborigines in lands now exposed to the influences of the white man's civilization." And indeed the information even hemanaged to compile from natives on mission stations or reserves is not very extensive.

Until the advent of the white man, the local population probably suffered from few ailments and their few simple medicaments reflect the simple but specialized life - gums, fish and animal poisons, stimulants, remedies for diarrhoea and fever etc. Aboriginal life depended on food and the successful hunting of animals and plants so influenced the use to which they put their plant drugs. The early settlers used some of the native remedies but as they held the people in distain for the most part, and as supplies of European drugs became more plentiful, less use was found for them and less interest taken in them from a scientific point of view.

The Aborigines used the leaves of *Trema aspera* (thought to contain Hydrocyanic acid) to poison flying foxes while branches from *Duboisia myoporoides* were put in water holes to poison eels and leaves of *Duboisia Hopwoodii* were similarly used to obtain enus. *Duboisias* contain *Duboisine sulphate*, a mixture of alkaloidal sulphates of B.P.C.'23. Tannin-containing bark of *Acacia decurrens* or Black Wattle was used to stupify fish in the coastal areas but bark of Moreton Bay laurel if given as an infusion(?) to an enemy led to difficulty in respiration and ultimatel death. The ripe fruits of *Calophyllum inophyllum* had a similar effect reputedly if mashed and mixed with cuttlefish shields from the beach and put in food or drink.

Resins to attach the stone head to the axe handle came from *Xanthorrhoea quadrangulata* among the Flinders Ranges tribes, others used *Acacia* and *Eucalyptus* gums - the former contains Arabin and was used by the early settlers for its nutritive value and as a base for jellies. Various roots collected by the gins were used as food including the root stock of the bullrush which contains starch, and the roots of *Cungevoi* which are only safe to eat if first dried by the sun or fire to volatilize the oils. The juice itself is still in use today as an antidote to stings, acting as a stimulant and rubefacient.

In the course of the chase and seasonal migrations, there was a use for stimulants. The acidic leases of *Casuarina* when chewed stimulated saliva and allayed thirst, and holes in the trunk of *Duboisia myoporoides* filled with water and left overnight, yielded the next morning a narcotic drink. But the most well known stimulant or narcotic to this day is "Pituri" which gained some publicity from being given to Burke and Wills by friendly natives on their famous trip. Pituri was made from *Isotona petraea* or more generally apparently from *Duboisia Hopwoodia*. The alk-aloid of thelltter has a similar action to Coca (until comparatively recently, used in the Western World as a cerebral and muscle stimulant)

and the finished product was highly prized for barter. The leaves and plant tops picked in August were dried in netted bags and the quid, if chewed in company, was passed from one to another. Sometimes mixed with potash and rolled in a leaf, it was smoked (particularly before a fight) releasing a powerful stimulant. Leaves of *Nicotiana Benthiana* were used for their similar action. Here the moistened and chewed leaves were rolled in ashes of *Hakea* twigs, and the quid passed around or carried behind the ear of Central Australian tribesmen. The leaves were eaten by old women only and / or men of all ages being apparently Taboo for young women. Gins used *Goodenia*, Probably as a decoction to make small children sleep on long journeys - the Stone Age mother had the same problem as her modern counterpart. The bruised roots of *Pittosporum venulosum* give out a powerful odour so they were placed near the gin's shelter to cause sexual stimulation, but the aromatic leaves of *Pterocaulon glandulosum* were inserted in the nasal septum perforation for cold in the head - common cold was known even in those times and treated as now with an inhalant on the "hanky". In Queensland, latex from *Alstonia agallocha* was rubbed on babies head to make the hair curly, and latex from some of the *Ficus* sp. was applied to the umbilicus after birth to dry it.

Chewed *Piper novae-hollandiae* relieved sore gums as a counter-irritant and for toothache the macerated leaves of *Grewia retusifolia* or the juice or gum of *Evodia vitiflora* was put in cavity.

Alstonia scholaris and *Alstonia constricta*, the "fever barks" containing the alkaloid Alstonine were known and used. From South Australia was reported a use for *Scaevola spinescens*. Both green and dry leaves and branches were placed in a hole in the ground and burnt. A recently circumcised boy squatted over and micturated into the hot ashes. This was done for 10 mins. allowing the steam to rise around the penis and was later repeated frequently. Just what effect this had is unknown but perhaps the steam helped to cleanse and soothe a slow-healing wound.

There were many remedies for dysentery - *Acacia* gum, Waterlily leaves, *Eucalyptus* gums and the whole plant of *Erythraea Australis* or native centaury were eaten. This plant has since been shown to contain curare-like properties and one derivative has been used in anaesthesia. Fruit of *Eugenia jambolana* as a carminative, a decoction of leaves and bark of *Barringtonia caeptrata* for chest pain and fever and the roots of *Brucea Sumatrana* were also part of the Medicine Man's Kit. But how many other plants and remedies were in general use among the tribes is unknown and as a tribal life comes to an end the knowledge will be gone forever.

Reprint from Australian Journal of Pharmacy March 1969.

References :

- J.H.Maiden - Proceeding of the Linnean Society of N.S.W. 1888.
- L.J.Webb - Proceeding of the Royal Society of Queensland 1959.
- J.H.Maiden - The Useful Native Plants of Australia 1889.

THE DANGER OF PESTICIDES.

In 1964 in the Northeast of the United States a survey was conducted on the recent developments in the nesting of the peregrine falcon. After 5 months of painstaking searching in all known distributions of the bird no occupied nest was found. Ornithologists now agree that the falcon has disappeared from that part of Nth. America where 10 years ago some 200 - 300 nesting pairs nested before, and much the same thing was true of the bald eagle and the osprey, two other predatory birds.

The reason : Pesticide residues reaching these birds through their food chain are destroying them. In one case in Ontario only one bald eaglet was hatched out of 12 active nests under observation. The osprey, it has been predicted, will cease to breed in N.E. U.S.A. by 1970.

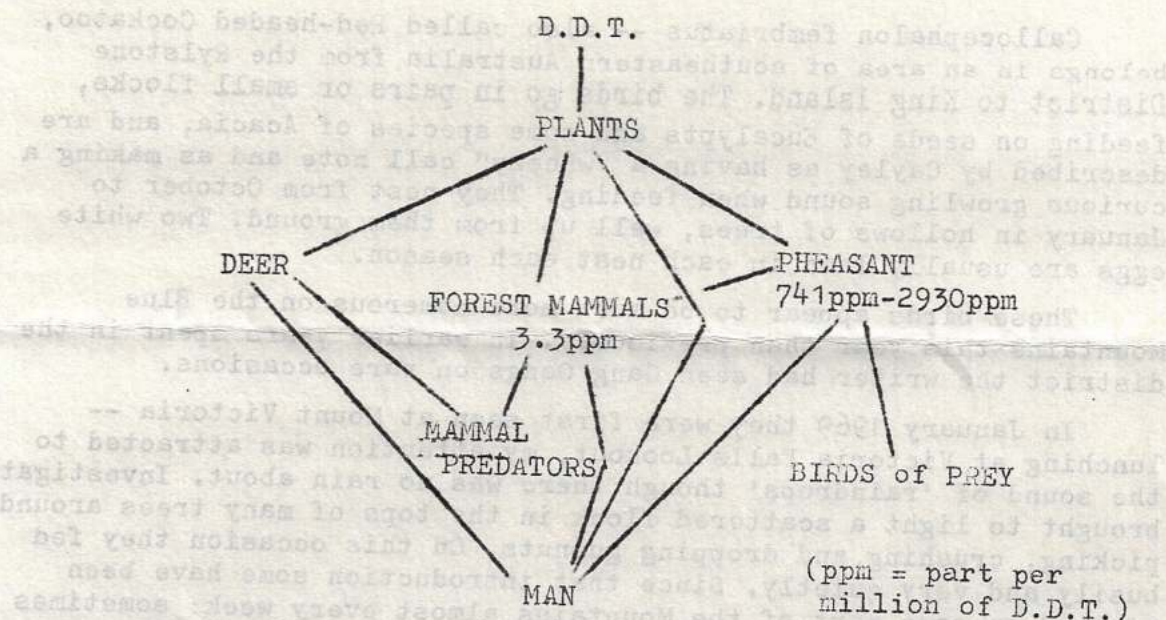
The U.S. Fish and Wildlife Service has found D.D.T. in almost all eagle carcasses it has examined, in fish, in osprey nests and in eggs that have failed to hatch. In England, pesticide residues are being found in dead birds and in fertile eggs and this accumulation of residue is sending the birds of prey to the verge of extinction.

These effects are not limited to Birds of Prey. Of 2,300 specimens of birds and mammals from 22 states of U.S.A. and 3 Canadian provinces examined by the Fish and Wildlife Service research Technicians, 1,753 contained varying amounts of pesticide residue.

Pesticide residue as a cause of death cannot be readily evidenced in animal populations. However a severe drop in populations could be experienced without leaving much to show what has happened. But examples are not rare. The fire-ant eradication campaign in the south of the U.S. was inaugurated in 1957 amid protests from Game Departments and other agencies. By 1960 2,500,000 acres had been treated with dieldrin and heptachlor at a cost of at least \$15,000,000. The Fire-ant was not wiped out, but Wildlife losses were so staggering that the extent cannot be fully known. The Quail population, e.g. dropped 90-100%.

In Illinois, a 4,000 acre area was treated with 3lbs of dieldrin to kill Japanese beetles. The result was almost total destruction of Quail and Rabbits. 27 dead Bobwhite rabbits were found in one 45 acre field and Cottontail rabbits totalled 151. It has now been disproved that plants cannot take up poisons in the soil, plants such as these accumulate large doses of residues which cause the wildlife who depend upon this feed to decline, larger animals such as deer and cattle may suffer from these residues also. The U.S. Food and Drug Administration has fixed the level of heptachlor permitted in meat offered for sale as Zero. In other words the administration would not take chances with residue levels in meat supplies to men.

This illustration is a typical Food Chain in Middle Western U.S.A. which allows for some residue readings found after D.D.T. spraying:



The sectors Deer and Pheasants which have contained 185ppm, and 741ppm-2930ppm respectively are in demand as meat by hunters. The U.S. Food and Drug Administration has limited human consumption of D.D.T. in meat to 7ppm! What happens to the residue accumulation of the 185-2930ppm which has accumulated in some animals? Wildlife and Man may share the same fate especially when insects are gaining immunity.

U.S. Senator Gaylord Nelson of Wisconsin introduced a Bill to bar the sale of D.D.T. He said: "We do not know the long term effect of D.D.T. on human beings, but the evidence of its devastating effect on Wildlife should be due cause for alarm. What a great irony it would be if, in our frantic efforts to kill insects, we eliminated man and made the world safe for bugs."

THE GANG GANG COCKATOO

Callocephalon fimbriatus -- also called Red-headed Cockatoo, belongs in an area of southeastern Australia from the Rylstone District to King Island. The birds go in pairs or small flocks, feeding on seeds of Eucalypts and some species of Acacia, and are described by Cayley as having a "wheezy" call note and as making a curious growling sound when feeding. They nest from October to January in hollows of trees, well up from the ground. Two white eggs are usually laid in each nest each season.

These birds appear to be much more numerous on the Blue Mountains this year than previously. In earlier years spent in the district the writer had seen Gang Gangs on rare occasions.

In January 1969 they were first seen at Mount Victoria -- lunching at Victoria Falls Lookout, my attention was attracted to the sound of 'raindrops' though there was no rain about. Investigation brought to light a scattered flock in the tops of many trees around picking, crushing and dropping gumnuts. On this occasion they fed busily and very quietly. Since that introduction some have been sighted on some part of the Mountains almost every week: sometimes giving the normal cockatoo screech, sometimes gurgling softly as though expressing enjoyment.

The pair last seen were on a ridge at Lawson. The female -- all speckled grey -- was silently devouring gumnuts. The male, similarly grey but with a brilliant pink head, was down in low scrub tearing apart the drumsticks of the narrow-leaved cone bush (*Isopogon anethifolius*) : and judging by his scratchy discourse was greatly enjoying something in these.

SUGGESTIONS FOR FIRE CONTROL - KATOOMBA & DIST. WILDLIFE CON. SOCIETY

1. Use of tanker planes to attack fires quickly as soon as spotted.
2. Well organised fire spotting is essential. Lookouts should be sufficient in number and manned around the clock when the fire danger is high.
3. All fire-fighting organisations and private citizens, who find fires burning without obvious control, should be permitted to extinguish them without prior reference to local fire control authorities.
4. A mobile commando-type force needs to be in operation.
5. In the villages, more preparedness is needed.
6. Penalties should be severe enough to deter from starting fires or contravening fire regulations.
7. Wardens in an N.E.S.-type organisation could be very useful in emergencies. Such wardens could be drawn from residents not capable of active fire fighting.
8. Mopping up and patrolling of roads and property could also be carried out by personnel drawn from those not sufficiently strong and vigorous for fire fighting.
9. Where "pre-suppression" burning is considered essential, it is necessary that all personnel be thoroughly acquainted with its principles and practices and that it be carried out under thoroughly responsible supervision.

The Society stresses that the bushfire problem involving, as it does, a number of States, calls for Commonwealth action and even for Commonwealth control.

To the Treasurer,
Mrs. D. Dark,
"Nimaloola",
Russell Ave.,
Valley Heights. 2777.

Enclosed please find the sum of \$ to cover one years membership*

Name in full.....

Address in full.....

Occupation.....

* Individuals \$2.00 annually or \$20.00 Life.
Associates \$1.00 annually - subscription to Kalori.
Junior 30 cents annually.
Family \$3.00 annually.