

AUSTRALIAN WILD LIFE

JOURNAL OF THE
Wild Life Preservation Society of Australia



CONTENTS

Twenty-seventh Annual Report	1
1.—The Angophora Reserve; The Big Tree National Monument at Avalon, N.S.W.	3
2.—Sanctuaries and National Reserves	5
3.—General Preservation	13
4.—General	20
5.—Ourselves and Membership	35
The Angophora Reserve: Some Notes on the Flora	38
Tragedies of Australian Acclimatisation, With Special Reference to Recent Proposals	45
Native Plants of New South Wales: Callistemons or Bottlebrushes	58
Ethics of Wild Life Preservation	62
The Record of Wildlife Control by Hunters	64

Price: 6d. TO NON-MEMBERS.

Vol. 1. No. 4.
January, 1938.



OFFICERS AND COUNCIL FOR 1937-38:

President:
WM. GEO. KETT.

Vice-Presidents:
Messrs. ERNEST J. BRYCE, ARTHUR J. SMALL, DAVID G. STEAD,
Mrs. E. W. WRIGLEY.

Council:
Miss M. M. BENNETT, Miss MARIE BYLES, Mr. W. H. CHILDS,
Mr. W. J. CLEARY, Miss M. F. CROMMELIN, Miss M. E. EDGE,
Miss THISTLE Y. HARRIS, Mrs. C. M. O. KELLY (Miss May Gibbs),
Mr. G. A. KING, Miss ELLA McFADYEN, Mr. A. P. RIGBY, Mr. J.
C. TIMMS, Mr. J. C. WIBURD.

Representatives of Associated Tree Lovers' Civic League:
Mrs. WRIGLEY and Miss CROMMELIN.

Hon. Treasurer:
JOSEPH V. TURNER.

Hon. Secretary and Editor of Journal:
DAVID G. STEAD.

Hon. Auditor:
K. A. MACKENZIE, F.C.A. (Aust.),
Public Accountant, 62 Margaret St., Sydney.

WILD LIFE PRESERVATION SOCIETY OF AUSTRALIA.
The Wild Life Preservation Society of Australia was formed in 1909 to encourage the protection of, and to cultivate interest in the Australian flora and fauna. The Society needs the help and interest of every citizen of Australia.
Members are requested to forward Subscriptions or Donations addressed to the Society, Science House, Sydney, or to any member of Council.
Applications for membership may be addressed to the Hon. Secretary, Science House, Sydney, or to any member of the Council.
Annual Subscription: Women, 2/6; Men, 5/-. **Life-Members:** Women, £2/12/6; Men, £5/5/-. **Endowment Members:** £1 per annum. **School Corporate Life Members:** £2/12/6. **Corporate Life Members** (open to other Australian and Overseas Societies and Associations, and to Municipal, Shire and other public bodies), £5/5/-. or 5/- per annum.

WILD LIFE PRESERVATION SOCIETY OF AUSTRALIA.
SCIENCE HOUSE, GLOUCESTER ST., SYDNEY, N.S.W.

Wild Life Preservation Society of Australia

Twenty-Seventh Annual Report

Presented to the Annual Meeting of the Society, held at Sydney,
2nd. December, 1937.

Probably never before in the history of the Society have so many matters of importance engaged our attention. There has been great activity in every department of our national work. Even so, our very last idea is to boast of what has been achieved, for we are all too conscious of what has remained to be done. The work of this organisation, if carried out in the way that we would like to do it, would be a full time job for a regular staff. Financial limitations constantly preclude us from doing much necessary work in various avenues in the several States—including particularly, protection and preservation work for individual members of our fauna and flora, and general duties concerning the establishment of sanctuaries, national reserves and national monuments.

We ask members and friends to kindly remember this when they are studying our present work for the public of Australia, or in reviewing any past achievements, and we invite them to use their best influence to divert funds to the Society's use—whether by direct gift or legacy—so that we may continue to serve Australia with still greater usefulness in the future, in the many ways that are possible for us, having in view our accumulated experience, and, may we say, authority, during the past twenty-seven and a half years. There is abroad, throughout Australia, an ever-increasing interest in the maintenance of the things which really make our Wild Australia. There is much evidence of this on every hand throughout all the States. It is an interest, however, which needs a certain amount of co-ordination and even implementing by an organisation such as this. Though the scene has changed most markedly since our inception in 1909, and there are now several agencies at work, part of whose duties carry them close to us, it is constantly borne in upon us, in our everyday work, that there was never a greater need for the exercise of our specialised experience and knowledge than to-day.

And now to a consideration of some of the more important matters which have been dealt with during the period under review, or which are occupying our attention at the moment. We feel justified in again giving pride of place to some mention of the sanctuary area at Avalon, New South Wales, which has been set aside by the Society and paid for out of our own funds, mainly for the purpose of preserving to the people of Australia as a National Monument, the greatest example of the Sydney Red Gum, *Angophora lanceolata*, known to exist. In our last Annual Report we mentioned the ac-

quisition by the Society of this wonderful natural asset, and promised to give fuller details of it when full arrangements for its preservation and control had been completed.

1. THE ANGOPHORA RESERVE. The Big Tree National Monument at Avalon.

In our last Annual Report we made a special announcement regarding acquisition by the Society of an area of land, situated at Avalon (a little north of Manly, New South Wales), on which was standing the largest known example of the beautiful Sydney Red Gum, or Smooth-bark Apple, *Angophora lanceolata*. We furnished also, a photograph of the tree in its beautiful wild setting, and promised a further reference to the matter when all arrangements for preservation and control of the area had been completed.

Negotiations for the purchase of this area were actually begun in July, 1935, and the matter was frequently discussed by Council before acquisition was determined upon and was confirmed at a special meeting of the Wild Life Preservation Society on November 24, 1936. From the beginning there was never any doubt in the minds of councillors as to the wisdom of having this piece of wild land set aside; it was just a question whether the major portion of our funds should be devoted to this purpose. The receipt of a sum of £78/7/- from the estate of our late councillor, William Cope, undoubtedly assisted the Society to a determination of this problem. Not only was it in accord with the terms of the bequest, but it was felt by all that this seemed just the sort of thing that Mr. Cope would have liked to have done himself. On behalf of the Society we have to express our great indebtedness to Miss Marie Byles, B.A., LL.B., for much legal advice and help given during these proceedings.

The whole transaction was financially concluded in January, 1937, and Council placed the area in the hands of three Trustees, previously appointed to take charge of the Society's assets. The Trustees are the President (William George Kett), the Honorary Secretary (David George Stead) and Councillor Thistle Yolette Harris. Later, Miss Harris was appointed as Honorary Curator of the Reserve. During the year most of the Reserve has been fenced and a wrought-iron double gate of chaste design has been put in. This fencing has been at the cost of Councillor Arthur J. Small, who has helped Council in many ways, and who has been a consistent helper of fauna and flora preservation for many years past. It has not been practicable to complete the fencing along one side of our Reserve, because negotiations are still under way with various neighbouring owners of land allotments, with a view to so adjusting the boundary line that the Society may be able to add a few feet (over the most part) so as to include the brow of a very picturesque sandstone cliff—part of the last outcrop of the Hawkesbury Sandstone hereabout. We do hope that we shall

have the full co-operation of our neighbours in this so as to make the Reserve still more self-contained, more beautiful, and more generally interesting, because of the added scenic and floral value to be so obtained.

Our main objectives, in setting aside The Angophora Reserve as a permanent sanctuary, are (a) The Preservation of the great Angophora Tree itself as a National Monument, to be held by the Wild Life Preservation Society for the Australian nation; (b) The setting up of an ideal self-contained Native Flora Area, containing some of the main floral features of the Hawkesbury Sandstone, and Narrabeen Shale, geological formations; which, in some respects, are the most remarkable in the world. To have preserved only the tree would have required but a small area of land, but it was essential that as much as possible of the arboreal environment should be kept as well; to ensure the continuity of life of the ancient tree itself. Whilst we do not know how long this tree will last, there seems reason to believe that—with care as to its feeding, non-interference with the root system and careful tree surgery for broken or decayed limbs—it will survive for a hundred, or even hundreds of, years. What its exact age is we do not know, but present investigations into the structure and rate of growth of the Eucalypts and their allies justify us in assuming that we are on the highroad to reliable age readings of such trees. **In all probability this great Angophora will be found to be a very great patriarch of, perhaps, anything up to a thousand years.**

On behalf of the Wild Life Preservation Society the Council desires to extend to the members of Scientific, Conservation, Historical and other societies of Australia, a very hearty invitation to visit The Angophora Reserve whenever they like—either individually or in organised parties of their various societies, to see for themselves this remarkable giant of its tribe in its natural bush setting, and under such an interesting plant association, brought about by the congress of two geological formations. For instance, they will find right alongside the great Angophora, examples of the Spotted Gum, *Eucalyptus maculata*, and other trees and shrubs associated with the Narrabeen Shales. For, notwithstanding the comparatively small area of the Reserve, it just happens to coincide with the last layers of the Hawkesbury series and the first of the Narrabeen series (which underlie the former). Students of Botany, and of our forests, will find a sojourn in the Reserve of great interest. Bird students also will find many species of insectivores to interest them if they visit in small parties creating no disturbance. It may be also that the visitor will be fortunate enough to see a wild Koala or Native Bear, as it has already been observed on this area, and there are known to be several in the vicinity.

A similar cordial welcome is extended also to tourists and members of the general public. But, to all visitors, we would kindly address this urgent reminder:—

(1) The Angophora Reserve is not a picnicking ground, though there is no objection to persons taking an al fresco meal there.

(2) No Fires Are Allowed. We would like to have put this in capital letters. The danger from fire to such an area must be very well known to every Australian, therefore the safest way is No Fires at all.

(3) No Picking of Wild Flowers, of Gum Tips or of Tree Foliage is allowed—unless under the written authority or personal supervision of the Honorary Curator or of the Honorary Secretary to the Society.

May we urgently invite the fullest public co-operation to help us in preserving this area inviolate for the present and future peoples of this land. May we ask also that nobody will allow of the slightest interference with any living plant there, either by removal, or by mutilation, or by marking. We mention the last, particularly, because of the almost incurable desire that some people have to immortalise themselves by cutting their initials in the smooth bark of Gum Trees.

Before concluding we would like to add a note as to the choosing of the name—"The Angophora Reserve." Several other names were suggested such as Angophora Arboretum, Red Gum Nature Reserve, Red Gum Arboretum and so on. As the great tree which is the principal arboreal feature of the Reserve has for one of its names "Sydney Red Gum" there was a desire to affix that name in some way. But against that it was truly said that there were so many "Red Gums" in Eastern Australia, all differing specifically one from another, that such a name could only create confusion among Australians hailing from different parts of the country. Some other names were also suggested which incorporated the surname of one of the signatories to this Report, but the officer designated, though highly conscious of the testimonial intended, could not accept such a suggestion as being in the best interests of the Society, or personally desirable.

And now, in concluding this section, may we invite our members and friends to study our balance sheet and see for themselves how very anaemic it now looks following our Great Adventure in the purchase of The Angophora Reserve. There have been many other directions in which we might have spent money very wisely during the period under review, just as there will be in the future. We need all the help that can be given. May we invite not only our members, but Australians everywhere to consider our problems as they really are—their problems—and help us to face them.*

*Directions to those who wish to visit The Angophora Reserve:—

Unless travelling by private car, take usual conveyance to Manly Beach (Boat, Tram or Bus). Travel from Manly by Palm Beach Bus. Alight at Morton's (or Wickham's) Store at Avalon. Then travel by Avalon Parade, Bellevue Parade, Seaview Parade and Palm-grove Road. In a bend of the road note the galvanised bar-iron gates leading to The Angophora Reserve and the notice a few feet back from the fence line.

2. SANCTUARIES AND NATIONAL RESERVES.

(a) **Sussex Inlet Sanctuary:** In our last Annual Report reference was made to the movement, fostered by this Society, in co-operation with a number of residents of the St. George's Basin—Sussex Inlet district of New South Wales, for the declaration of a number of privately held areas, and some public lands there, as a sanctuary for birds and animals. Part of the area (between St. George's Basin and Jervis Bay) falls within the jurisdiction of the Commonwealth, and so comes under the operation of the Animals and Birds Protection Ordinance of 1918-1928 of the Territory for



Flannel Flowers in The Angophora Reserve.

the Seat of Government. By this Ordinance all animals save Rabbits, Hares, Native Dogs, Foxes, Tiger Cats, Native Cats, Flying Foxes, Venomous Snakes and "all domestic pests and parasites" are wholly protected; while all birds are similarly protected except Sparrows, Starlings, Lorickeets (including all fruit-eating Parakeets), Crows, Silver Eyes, and Cormorants. It will be seen that the numerous exceptions rather encourage the presence of the "all-round shooter," so we hope to discuss this matter further with the Commonwealth authorities.

As regards the protection of Wild Flowers and Native Plants in this Commonwealth portion, it may be mentioned that a Timber Protection Ordinance has been in force since 1919 prohibiting the destruction or damaging of any trees or plants. Following our representations likewise, the Canberra authorities issued the general Ordinance covering the special protection of certain wild flowers and plants throughout the Territory for the Seat of Government (including the Territory of Jervis Bay) which had been under consideration for some time.

South of the entrance to St. George's Basin (i.e., Sussex Inlet South) and abutting on the shores were the private properties proposed to be included in the sanctuary, and southward to these again an area of State Crown Lands surrounding Swan Lake, which we asked should also be included. This was agreed to by the Chief Secretary and the sanctuary was duly proclaimed on 26/2/37.

(b) Shooting on Wyangala Dam Sanctuary: In our last Annual Report we made references to the invasion of Burrinjuck Dam Sanctuary by shooting parties, and specially mentioned as a matter of deep concern that "the shoot was deliberately planned by an anglers' association in conjunction with the local police," and was actually carried out "under police supervision!" Following hard on the heels of this gross interference with a much-needed aquatic sanctuary came another almost equally bad, when the Lachlan River Dam at Wyangala, became the scene of another unwarranted invasion.

In the "Temora Independent" for 5/2/37 it was stated that "On Sunday a party from Darby's Falls, near Cowra, had quite a hectic time disposing of young shags. Mr. Clem Newham killed 27 on one limb . . . this party disposed of over 100 in a very short space of time." There was also a reference in the same item to making Wyangala Dam a "success" as a fishing resort.

These dams are of great value in adding to the inland fish supplies, of course, and we naturally esteem them very highly from that point of view. But they can be very great aids in preventing the disappearance of our aquatic birds. If such are not interfered with. The carrying of guns into or any other disturbance of, the sanctuary, is an offence under the Birds and Animals Protection Act—unless authority has been obtained.

We immediately got into touch with the New South Wales Water Conservation and Irrigation Commission, under whose actual charge these great reservoirs come, but, as suspected, the Commission had not been an official party to this unfortunate action. They referred the matter to the Chief Secretary, when it appeared that the circumstances were very similar to those surrounding the Burrinjuck invasion.

Aside from the breaking of this sanctuary altogether, we should add here that it would appear that this country is overflowing with "experts" who seem to know so much of Nature's workings as to be able to tell almost instinctively whether a bird or a beast or a fish are helpful or noxious. But, this notwithstanding, we are able

to say that no evidence has ever been produced that Cormorants are of any disservice in large areas of water of good depth. That they eat fish and yabbies and shrimps and frogs is certain, of course, but several of the small species of fish that they eat are inveterate spawn eaters—giving rise to still another thought.

(c) Gilgai Sanctuary for Flora and Fauna: In February, 1937, our local representative, Miss Merle Schwenke, at Gilgai, near Inverell, N.S.W., brought under our notice an area of land, between 63 and 64 acres in extent, that was being held open for Special Lease, and which, she pointed out, would make an admirable sanctuary for wild birds and native flowers—both of which were "becoming scarce in the district." It was shown that the greater part of the land was quite poor country, not suited to grazing—chiefly consisting of granite boulders—but possessing very beautiful trees themselves of little economic use.

After consideration Council decided to strongly recommend the dedication of this area for the purpose indicated. Local support from responsible citizens was forthcoming and the request was placed before the Chief Secretary with a view to the Lands Department being persuaded to agree to the proposal.

It is therefore gratifying to be able to report that we were notified in July that the land would be reserved as desired. Though not very extensive this is really a very important reservation in that half-way country between the coastal rolling lands and upland country and the wide plains of the western parts of New South Wales. We desire to record here our indebtedness to a very worthy member, who, although she has not long been with us, has been of much assistance in several avenues of our activities.

(d) Depredations of Vandals in Kuring-gai Chase: This National Park, lying to the north of Sydney, has often been the scene of mistreatment by vandals, who have, variously, destroyed and stolen wild flowers, cut down trees, hunted the few remaining Wallabies, started innumerable bushfires over many seasons, besides leaving the all-too-common trail of empty tins, bottles and rubbish of every description. Admittedly, such an area is difficult to control and protect, when it is approachable by land and water from several directions. But, even so, the Society has often felt keen disappointment that so much destruction and general vandalism has gone on without more official check. Not only this, but some unnecessary destruction of flora—particularly of beautiful native trees—has actually occurred, as in the National Park of the Port Hacking district, through what seems to be thoughtless or careless planning by the park authorities themselves. Chiefly, such official destruction (or that done while official work was in progress) has been done during the making of paths, when, instead of diverting a footpath or bridlepath so as to skirt the main floral features, the path goes ahead regardless of such.

It is recognised in most parts of the world, where the internal arrangement of a park is being planned—it is fact it is regarded as an axiom—that the natural features take first place, and every other consideration is subordinated thereto. One has often seen, abroad, how even a great road has been diverted so as not to interfere with some remarkable or beautiful tree or some special rock or other scenic feature. But many of our park authorities in Australia have yet to learn this primary need for the areas coming within their charge.

During the past year the Trustees have had a number of successful prosecutions against persons removing wild flowers and otherwise offending against the preservation of the park. On one important occasion, however, where hunting dogs were concerned—a very old trouble, reported by us in previous years—the Trustees lost the case. As this incursion of dogs is an old trouble it is regretted that the evidence obtained was inconclusive. Obviously it should be an absolute rule in all such Australian parks, as in the great National Parks in America, that no dogs are admitted, and any found there are liable to be destroyed. It is doubly important in Australia where so much of the fauna is so easily destroyed by dogs, which do not have even the natural checks to be found in some American parks, where some of the carnivores, and even the larger wild mammals, are often able to deal with the dogs themselves.

(e) **National Park Administration in New South Wales:** The need for a central Parks Administration has often been emphasised by this Society for many years past, directly to Governments, in public statements from time to time and in our Annual Reports. Local administration of purely local park and play areas may be satisfactory—though even that is very often open to question, because of the prevailing lack of expert knowledge by local authorities in landscape treatment, correct treatment of tree areas, and arboriculture. But the great reserves, National Parks and National Monuments of every kind, should come within the control of a central expert management, which may be relied upon to bring to the work an application of that highly specialised knowledge and understanding which are essential to a proper administration of such areas in the interests of the people as a whole, while conserving to the full, the needs of wild life preservation and the preservation of wild scenery. Local groups or committees to assist in such a unified or co-ordinated administration might still be appointed. We gave full publicity to this in our last Annual Report, and the experiences of the last twelve months have still further emphasised the need. The Parks and Playgrounds Movement has been urging the setting up of such an authority—an authority which would not only advise and control, but would keep the State well informed as to future needs, so that reservations would not be made in the haphazard, even accidental manner, which is such a marked feature of this important part of our national life to-day.

So long as the present type of incoherent, unco-ordinated, inexperienced administration exists, we shall have a constant repetition of the abuses and difficulties, the narration of which forms such a large part of our annual work.

(f) **Deer in National Park (Port Hacking, N.S.W.).**—We refer members and friends to our remarks under this head in our 25th Annual Report ("Australian Wild Life," Vol. 1, No. 2, p. 6). There has been a recrudescence of public discussion about these Deer—so unwisely introduced into this great Nature Park years ago—which have committed such depredations among the ground flora, and have prevented, in many instances, the natural regeneration of forest trees, while monopolising the natural food supplies of an area which used to carry a considerable native stock of Wallabies, Rat-Kangaroos, and other ground fauna.

Many proposals have been made through the Press, and, we understand, to the Trustees of the Park, as to the distribution of the stock of Deer. It is necessary for us to speak with no uncertain voice here: The proposals which have been made for the placing of the Deer on (1) some special area on the South Coast of New South Wales, (2) on "waste lands" of Australia, are equally foolish. A proposal to enclose 5,000 acres of land on which to keep such animals would not only be wrong because of the impracticability of keeping the animals where one put them—with the constant danger of their spread into moderately good coastal lands—but would be a very grave "miscarriage of justice" in the treatment of our own Australian wild life. We have found it impossible, so far, to get Governments to enclose such an area for the regeneration of native animals; how then could we justify such an effort and expense for an introduced pest?

Some of the suggestions about liberating the Deer elsewhere are made by shooters or would-be shooters, who see, in this, a further excuse to go out and kill something. As far as liberating on "waste" lands is concerned, it is evident that such suggestions are made in a complete misunderstanding as to what Australia's waste lands are like, as the only lands not under some form of occupation to day are so arid or of such a desert character that the Deer would die from starvation or thirst or both. The only merciful thing to do, then, is to destroy the Deer where they are, and this may best be done by trapping in "pound traps," where they may be caught and destroyed humanely.

(g) **Proposed Establishment of Large Faunal Reserve.**—This Society has always stood firmly on the principle that the various States should advance far beyond the stage of merely setting aside areas of country as sanctuaries, for birds or animals, or as floral reserves, and should do for the various animals comprising our land fauna, and for that section of our flora that we usually group under the title of wild flowers, exactly what we already do in Australia for the regeneration of our economic forests. That is, we should conduct and supervise the actual breeding out, where neces-

sary, of certain members of the fauna, which are rare, or which have great difficulty in re-establishing themselves; or, with other species—which only require an absolute (not a nominal) protection, safeguarded at all times from interference by the public—that they shall be given that full protection under the charge of competent curators or rangers so that they may develop again in peace amid their proper home environment.

We have demanded this as something which we owe to the wild life itself, primarily; and, secondly, that Australians present and future should be able to see for themselves those bushland things—bird and animal, tree and flower—which go so far toward the make-up of Australia. No ulterior or mean considerations, such as “tourist value,” should control our actions in this, and nothing in the nature of organised zoos or menageries should be admitted as in any way satisfying our aims here.

We lay special stress on this important First Principle of fauna and flora preservation here, to emphasise our stand in the matter to be now mentioned.

During September of this year, various Societies received an invitation from the Royal Zoological Society of New South Wales to attend a Conference of various bodies interested in fauna preservation, with a view to a scheme being put before Government, having for its object (as it seemed to us) the setting aside of a great faunal reserve “to mark the 150th Anniversary of Australia’s foundation.” While many of us are of the idea that no Anniversary considerations are as powerful as the demand of the fauna itself, we were agreeable to take part in the discussions, and delegates were duly appointed. And now the following letter, dated 12/10/37, of New South Wales, will best explain the present position:—

I wish to report to the executive of the Parks and Playgrounds’ Movement, that I attended a Conference convened by the Royal Zoological Society of New South Wales—and held at their room—relative to the proposal (as we understood it) that a large faunal reserve should be set aside for the regeneration of as many representatives of the native fauna as possible under natural conditions. I attended officially as a Vice-President and Hon. Secretary of the Wild Life Preservation Society, as President of the Naturalists’ Society, and—at the P.P.M. President’s request—for this body. As the Bush Walkers’ Federation representative was detained at the last moment, I was also asked to act for that body. All of these bodies, I think, are interested, more or less, in the same way, in any such proposal.

My disappointment, however, was very great, when I found that the Conference spent its time chiefly on a consideration of the possibility (even desirability) of setting aside, and enclosing, for “experimental purposes,” (a very vague and dangerous thing indeed) portions of several of the principal existing national parks!

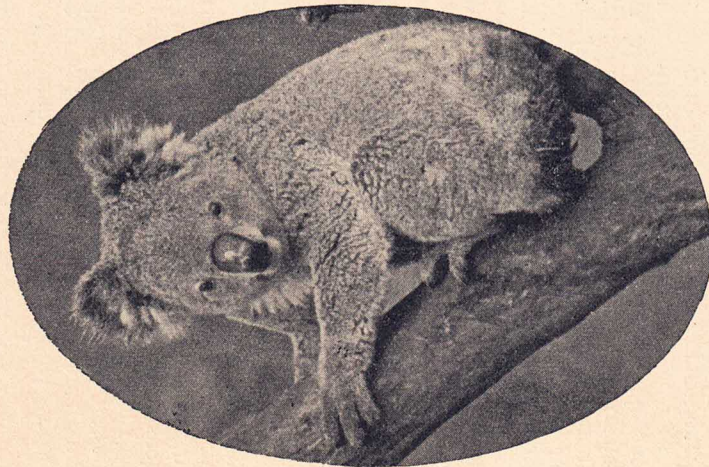
Another meeting is to be held, but I feel that it is essential that the Executive should be advised of what I consider to be a most dangerous proposal, which would ultimately militate not only against the interests of the wild fauna itself, but would most seriously endanger the rights of the common people in such parks, and give just one

more reason for an intrusion of permanent or semi-permanent structures thereon.

I am putting a similar view to my own Council on the 14th inst. I will report further after another meeting of the conference is held.

In the meantime I would advise all of our PPM bodies to be on guard.

At its meeting on 14/10/27, the Council of the WLPFA unanimously endorsed this letter as representing the attitude of this Society to the present aspect of the scheme. We trust that the Conference—if, or when it meets again—will not pursue the present course, which we feel obliged to strongly oppose, equally in the interests of the fauna and of the Australian people themselves.



Most encouraging reports continue to come to hand from various parts of the Eastern Division of New South Wales, indicating a sturdy attempt by the KOALA (pronounced Ko’la) to re-establish itself in some of its old bush haunts.

The most urgent need is to build up on this by completely protecting the small colonies from human interference, and by assisted breeding in some places, as outlined by us.

The tendency of many Australians to regard the Koala as a “tourist attraction,” is, apart from its inherent meanness, a great danger to the Koala’s perpetuation, and leads to the establishment of menageries, which are entirely inimical to the animal’s freedom and welfare.

(h) Proposal for Great Shoalhaven National Park (N.S.W.).

—Recently, Mr. Mark Morton, M.L.A., has put forward a proposal that the New South Wales Government should set aside a large area of land, additional to areas already reserved, in the neighbourhood of the Shoalhaven River (and the great Shoalhaven Gorge), for the purposes of a National Park. It is proposed to utilise some 65,000 acres of land, extending westward and southward from Fitzroy Falls, near Moss Vale, to the Kangaroo and Shoalhaven Rivers, and in the vicinity of Bundanoon, for a sanctuary for the preservation of the existing native animals and birds and the protection of flora.

We already have about 7,700 acres in a part of this district (See No. 1 of "Australian Wild Life," p. 9), and its extension to include the areas mentioned would make one of the outstanding National Parks of the world. This Society is keenly supporting the proposal—particularly as this area is, in many respects, somewhat isolated from other sections of country, and a great deal of future restoration work, under properly managed conditions, might be carried out there. This is the sort of reservation we had in mind when we took part in the recent Conference, mentioned above in this Report—and in which we were so disappointed.

As the present proposal is now under discussion, we hope to give a more detailed account of it in our next issue.

(i) **The Jungle, Mount Tomah.**—In our 24th Annual Report mention was made of "the precarious condition" of this area from the point of view of public ownership and its permanent preservation. Most people had, for years, been under the impression that this was a National Reserve, because it had been described as such in the Press from time to time. We pointed out that most urgent action was necessary if the area was to become the permanent property of the people. Yet, although a small sum of money would have sufficed to close the purchase (by a company that intended to set the area aside as a sanctuary), and though Government was approached on a number of occasions, both directly, by deputation, and by letter and through the Press, no help was forthcoming, and the property lapsed into the hands of the original owners, and so was lost to the people. It is worthy of mention here, that the Company made it quite clear to Government that they desired to sacrifice their own large contribution (money already paid to the vendor—between £2,500 and £3,000) in the common interest, if Government would complete the purchase.

The vendor also showed a surprising lack of interest in what was, after all, for the public weal; for, when he was asked if he would release a part of The Jungle—of a value equal to the money already paid to him—he refused! While, under the law, the owner was quite within his rights, his refusal was a most regrettable one, and caused very great disappointment in many quarters.

This Society is in a position to know of the things mentioned, at first hand, as we were an ordinary shareholder, in what we confidently anticipated would be one of the outstanding sanctuaries of New South Wales.

Following the reversion of the property to the vendor, a statement was made on his behalf, to us, that it was intended to carry The Jungle on as "a private reserve for the public benefit," and mention was made of "many improvements" which had been made; but inquiries by this Society failed to elicit anything which might justify the belief that there was anything permanent in such an intention. Incidentally, "improvements" were quite the last thing desired by these interested in fauna and flora conservation.

(j) **Proposed Toonambar National Park.**—Action on this proposal has not yet been concluded. The area—in the North Coast district of New South Wales—is to be personally inspected by the Minister for Forests in New South Wales and the Forestry Commissioner before further action can be taken.

3. GENERAL PRESERVATION.

(a) **Grasshopper Poison and Bird Life.**—Certain districts of Queensland and New South Wales have recently experienced one of the worst visitations of Plague Locusts or Grasshoppers ever recorded in this country. Among the various means used for destruction of the hordes of the menacing insects, poisoned bran is regarded with the most favour by the officials of the Department of Agriculture, and is considered by them to be the most valuable of those which it is economical to use. Even so, the cost is very great indeed to both Government and individual landholders; while, at best, it can only prove a palliative—though producing a 100 per cent. kill in parts of the many millions of acres of land affected.

Bird lovers and naturalists generally have been much exercised as to the potential destruction of native birds throughout the country affected—totalling several thousands of square miles—and the matter has been brought up at several meetings of the Council of this organisation, while also forming the subject of correspondence. Evidence, as placed before us, and as appearing in the daily Press of Australia, has been highly conflicting here. There have been several claims that large numbers of birds had been destroyed (a) through eating the poisoned bran itself; and, (b) through the eating of the poisoned Grasshoppers.

Several members of the Graziers' Association of New South Wales have reported and have given specific instances of the destruction of bird life through the use of this bran bait. Mr. W. G. Howard, of the Gilgandra district, is reported as saying that, after he had laid out poisoned bran in accordance with Departmental instructions to poison Grasshoppers, he found at least 12 birds, known as blue larks, dead in a small paddock. The country was timbered and grassed, and hundreds of birds could have been dead without being seen.

Mr. Howard's "Blue Larks" would, no doubt, be the so-called Wood Swallows, *Artamus*, also known as Blue Martin. Mr. W. D. Milgate, of Curban, wrote as follows—

"I have used poison bait for Grasshoppers, according to the formula recommended by the Department, and I can definitely state that, after using the bait, I saw quite a number of Wood Swallows dead, and as many as 10 under one tree. I never saw any dead birds previous to laying the poison. I am definitely against the use of the poison, as I am satisfied that it destroys the birds that are the Grasshoppers' worst enemy.

"I can get quite a number of landowners in this district who have had similar experience, and will not, under any consideration, use the bait for the same reason," Mr. Milgate added.

Mr. W. S. Irwin, of Wallaroy, Tooraweenah, stated that he saw two Blue Larks dead close to a site where poison had been laid for Grasshoppers. The Grasshoppers were not very thick. He thought the birds ate the dead 'Hoppers.

In December, 1936, the Association decided to ask the Minister for Agriculture to have a thorough investigation made and to obtain the co-operation of the Commonwealth Council for Scientific and Industrial Research. An important suggestion also was that attention should be directed to the effects of the poison upon useful insect life. Mr. W. W. Killen, a well-known pastoralist bird student, has also claimed to have evidence of bird destruction by this poison—the birds destroyed, as he says, being themselves extremely useful Grasshopper killers. Still another well-known landholder, also a competent bird student, Dr. E. C. Chisholm, of Barellan, has written in support of Mr. Killen's contentions. Several others also could be quoted, omitting altogether many undoubted bird lovers familiar with country problems who have made only general expressions of their convictions in the matter.

If this poisoned bran is as dangerous as some think, then there would seem to be very little hope for some of the bird species; for, in this last Grasshopper visitation—up till November, 1937—enormous quantities of poison baits have been distributed. For instance, in the Moree Pastures Protection District of New South Wales, the Secretary to the local Board stated that up till the first week of October only, no less than 650,000 lb. of poisoned bran had been distributed—"with excellent results," as he reports.

But we are obliged to present another side to the argument. The Government Entomologist of New South Wales, Mr. W. B. Gurney, who has been known to us as a friend of the birds for many years past, has stated definitely that so far there has been no evidence of any poisoning of the birds, although this matter was being closely examined. It is possible that mortality has occurred when the poisoned bran has been distributed in pellets, and not in the flake form which has been uniformly recommended, he says.

It is worthy of mention here, also, that a few weeks ago, when the Queensland Minister for Agriculture was introducing emergency legislation to deal with the Grasshopper plague, he was asked in Parliament whether the baiting would further reduce bird life. He replied, "No. Twenty officers of my Department have been watching for any indication of bird destruction, and we have seen no sign of it."

It may be remembered that we dealt with the possibilities of the poisoning of birds in our short discussion on the subject in our Twenty-fifth Annual Report ("Australian Wild Life," Vol. 1, No. 2, p. 7, 1935), following the heavy infestation in Queensland and New South Wales of 1934. The authorities then promised us

that every care would be taken and the incidence of the poison would be carefully watched. At the same time we were assured that the weight of evidence and the official experiences of South Africa, Canada and the United States of America were all against there being danger to bird life. And finally comes the evidence of Mr. J. R. Kinghorn, Ornithologist of the Australian Museum, who has reported that he has fed poisoned Grasshoppers to native birds and fowls for some time, but none has died. A search of country that has been extensively baited with great success did not yield one bird that could be said to have died from eating Grasshoppers.

Many of our native birds are great Grasshopper eaters, both in the larval and flying stages of the plague. Ibis, Bustards (Plain Turkeys), Wood Swallows, Magpies, and others, all play a part; but, under the very best of circumstances, they cannot prevent the development of the mighty swarms of Plague Locusts, which have been but just one of the difficulties met with in the opening up of vast stretches of pastoral and agricultural country. But, if helped by rigorous protection, they are able to play a very important part throughout normal years in restricting the development of the pest.

(b) Wallaby Protection in Bilpin District (N.S.W.).—Our past Reports have given many instances in which attempts have been made to have local or State-wide protection lifted from native animals, either to allow alleged "sports" to satisfy their craving to kill, or because the price of skins happened to be favourable. The reasons mentioned were the real ones, of course, but not those submitted to the authorities. Sometimes it is made to appear that certain marsupials are over-running the country, when but few are present; or, it would appear that orchards are being destroyed, where none exist; or, the "natural feed" is being destroyed, when the real culprit is the rabbit or the area is overstocked. There have been bona fide cases of invasions by certain marsupials at times, but we are not dealing with this type of problem here.

In May of this year, a valued member at Kurrajong brought under our notice a determined effort which was being made to have the protection lifted from the few Scrub Wallabies remaining in the Bilpin-Kurrajong district. From the information supplied by him, we take the following extract:—

From my own knowledge of The Jungle country, I know that the country is not overrun with Wallabies. There are a few there. But damage to a garden at The Jungle did not come from the Wallabies, but from the Rabbits. I would say that the comparative amount of damage would be in this district, about a thousand to one in favor of the rodent as compared with the marsupial. I have reason to believe that numbers of skins of native animals have been secretly sent from this district. They have been destroyed and are being destroyed where there is no restraining hand, and to lift the ban entirely would be nothing short of criminal, and hurtful to all who love our native animals and birds.

Our representative also sent us the report of another prominent resident who had been in the district for fifteen years, and who

stated that the damage done by Wallabies was infinitesimal, and that the "real motive" was "to let those with guns have a free hand to shoot the few Wallabies left." He said, further, "If the shooters would confine their attention to the real pest, the rabbits, some good would be done."

The Council sent along a strong protest to the Chief Secretary of New South Wales, who, after having made enquiries, refused the requests for an open season, the applicants being informed that, if it could be proved "that the animals are proving destructive on any particular holding, the position could be met by the issue of a license to destroy a limited number on that holding during a specified period."

This case is presented in this Annual Report as a further example of the need for constant watchfulness in many directions and in almost every department of our work, if our fauna is to survive.

(c) Mutton Bird Plumage.—In mid-November, 1936, we received from Captain MacCunn, London—acting on behalf of the Royal Society for the Prevention of Cruelty to Animals in England—an urgent cablegram informing us that "the Trade" was trying to add the skins of the Australian Shearwater or Mutton Bird to the list of birds allowed to be imported into Great Britain under the Importation of Plumage (Prohibition) Act, 1921. The Society asked for our support to their opposition to the proposal. In reply thereto, we sent the following telegram:—

"Wild Life Preservation Society of Australia strongly opposes admission of Shearwater, or other Petrels' plumage, and urgently requests the authorities to refuse applications in the interests of bird conservation."

In their following letter, of 31/12/36, the London R.S.P.C.A. said, *inter alia*, "Every exemption, of course, from an Act, weakens its effectiveness; every addition makes the Customs Authorities' work more tiresome and difficult, and smuggling easier." The application was made to the Board of Trade Advisory Committee.

In due course, by letter dated 14/1/37, we were very glad to learn that the application had been refused, and so one more possible avenue for the encouragement of trade in our native fauna was closed. In the RSPCA letter, we were informed that the application had been rejected by six votes to three. The letter continued: **Your Organisation's splendid support on behalf of this bird, and in maintaining the integrity of the Act, contributed to this success.**" And, further, "The fact of your Organisation being Australian carried great weight, and its views are held to be highly important."

We are sure it will be realised that had we not been successful, not only would a new market, intended to stabilise an increased destruction of this bird, have been created, but the resultant sales in England would have greatly undermined the British Act.

(d) Illicit Traffic in Possum Skins.—Because of the abuse of permits to export skins of animals from Australia, action was taken during 1937 by the Commonwealth Authorities to tighten up control. In doing this, the Minister for Customs stated—as we have pointed out from time to time in our Reports—that there was strong reason to believe that most of the Possum skins illegally exported had been packed in bales of rabbit and fox skins, for which export permits were not required. From May 1, 1937, the following conditions have been imposed—

The concession under which exporters were not required to obtain permits for the export of the skins of Rabbits, Dingoes, Foxes, and Hares will be withdrawn.

Exporters are required to give notice of intention to export, and obtain permits for the exportation of all furred skins before such skins are submitted for export.

The submission for export of such skins, in respect of which notice of intention has not been given and the necessary permit to export obtained, renders the skins liable to seizure.

Before a permit is issued, the skins are examined at the exporter's premises by a Customs officer to ensure that the skins are in accordance with the notice of intention.

After examination the packages are sealed by the officer, and export is not permitted unless examination at the wharf before shipment discloses that the seal is intact.

In every instance, a condition governing the issue of a permit to export is, that the skins were collected in accordance with the law of the State.

(e) Marsupial Killing in Coolong-Yerranderie Area (N.S.W.).

—During September last, some misgiving was caused by a Press statement that, "Owing to the depredations of marsupials," in this district, the New South Wales Chief Secretary had declared an open season for the killing of Kangaroos and Wallabies. However, this proved to be yet another one of those cases in which "the wish is father to the thought," causing interested parties to disseminate wrong information, and to send such to the Press. Enquiry showed that it was not true, and the Chief Secretary issued an official statement to the effect that a licence had been granted for a short period to kill a limited number of Kangaroos only on one holding in the vicinity, where, it was stated, "the animals were causing some destruction to the crops." Permission to kill was limited to "the owner and his servants."

(f) Proposed Kangaroo and Emu Drive.—All Nature lovers and those interested in Nature conservation have to be continually watchful because of the recrudescence of practices which have so frequently been combated in the past. The Kangaroo and Emu drive, as a "sport," should never have existed at any time—all humane people agree with this, whether they are on the land or city bred—but, whatever excuse might have been given in the past, at least the more enlightened modern conscience should render public protest quite unnecessary. Yet we have again to refer to the matter here. In connection with the Australian 150th Anni-

versary celebrations of 1938, we noted from a Press item that the Moree (N.S.W.) Committee intended to arrange a Kangaroo and Emu Drive "for the entertainment of visitors." Apart from any official action which may be taken by the Chief Secretary and the Official Headquarters Committee, in Sydney, as a result of our protests, we trust that the Moree Committee will not endeavour to carry this inhumane thing through. There are surely many natural attractions in the Moree district without having to promise visitors something to excite their blood-lust as a bait to attract them! As we have often pointed out, too, it is impossible to reconcile officially organised or condoned cruelty, and the various agencies for educating the young in a better understanding of kindness and fauna and flora preservation. We gave this matter special prominence in our 1935 Report, to which we would refer members and friends. This idea of getting entertainment out of the terror and maiming (as often has happened) of Kangaroos and Emus is a horrible thing—a relic of our very "bad old days."

(g) Confining of Protected Birds.—As usual, many reports have come to us, during the period under review, of the caging, or confining by wing-cutting, of various protected birds in New South Wales and elsewhere. These were chiefly Kookaburras and Magpies, as of old; but the list also comprised a number of other species. One resident of Roseville, near Sydney, who was prosecuted during May, had in his possession an Apostle Bird, two of the Western Bower Bird or Weeta (also called Pink-neck Bower Bird), two Ibises, a pair of Topknot Pigeons, and two pairs of Peaceful Doves. He claimed that he was keeping these birds "in the interests of Science." But we may properly claim that the interests of science in this connection are identical with those of conservation and humaneness.

Though we specially refer to these cases here, we have no reason for believing that the practice is increasing. Rather does it seem that the public are becoming increasingly conscious of the need for preservation work—largely, we hope, through our own widely-diffused work—so that there is a greater tendency to report such occurrences.

(h) Alleged "Pigeon Slaughter" by Hawks.—Most species of the Hawk tribe are quite harmless—insofar as they affect human occupations or pet-keeping—though some few species are considered noxious by the farmer with the poultry yard. The very name, however, causes the whole tribe to be treated with scant mercy, regardless of species, by most people. Consequently, it is quite fashionable to blame Hawks for all sorts of misdeeds without troubling about proof. We include the following matter as evidence of this:—

The "Sydney Morning Herald," of 11/10/37, published a news item headed, "PIGEON SLAUGHTER FEARED," "Hawktorn Bird Gives Clue," "Nearly 600 Homers Missing." Absolutely not a tittle of evidence was produced to show that any Hawk was

responsible for the loss of the 600 missing Homers. The letter, given below, which was sent to the newspaper by the Honorary Secretary, and was later endorsed by Council, is given in full, as it may be useful to bird-lovers who find themselves non-plussed at times by the frequent reiteration of unproved damnatory public statements against Hawks in general. The letter was not published by the paper:—

Sir,—Bird lovers and friends of our wild life generally will be very perturbed at the allegations in your columns of to-day's Herald, attributed to the Bankstown Pigeon Club, as to destruction of Homing Pigeons by "Hawks." I quote the name for a very special reason—to many of the general public, and to many pigeon fanciers, all of the hawk tribe are just "Hawks"; all having the same habits, and all being destructive of pigeons when opportunity offers. Yet the naturalist knows that, of the thirty species of Eagles, Hawks or Falcons in Australia, only a very limited number have even the power to destroy a flying Pigeon—the Pigeon being one of the strongest flying birds. Of this limited number, I consider, after many years of observation and record in many parts of Australia, only a Falcon may be considered as at all dangerous to any Homing Pigeon, and even then under unusually favourable circumstances (from the Falcon's standpoint).

When homing birds fail to arrive to schedule, it is the regular thing for ex parte statements to be made that "the Hawks must have got them." Then, naturally, the next step is to say definitely "the Hawks got them." Thus the flimsiest case has been built up against all Hawks. Some of which are insect eaters, some low fliers, some keeping themselves to river banks, and very few riding high in the air. And from such a flimsy case has often come a demand for the general destruction of a tribe of birds, many of which are harmless or even useful. Such of the Hawk tribe as are possible destroyers of Pigeons are not sufficiently numerous over the long straight course of a Pigeon to account for even a fraction of the birds which never arrive.

In the present case, because only four birds out of 600 have arrived, it is at once assumed that Hawks got the others. Yet, at that very time (according to your account), one bird which had been missing for six weeks had actually arrived. Presumably six weeks ago, when it failed to arrive, it also was placed among the victims of "the Hawks." Between Broken Hill and Sydney there are hundreds of miles of very bad Pigeon—and very bad Hawk—country. Without studying the individual birds, their records and their pedigrees, as well as the types of weather ruling over the course at the time, it would be unwise to even hazard a suggestion as to the causes of non-arrival.

Finally, there is no evidence at all that the bird with the torn neck came into contact with a Hawk (say a Falcon), for they do not make that sort of wound at all. Most likely the bird had hit with great violence a telephone wire not far from home, just as the Turtle Doves often do.

We do ask that our people will give the fullest and most merciful consideration to our wild birds, and not to condemn them so readily on the slightest pretext or anybody's say-so.

(Sgd.) DAVID G. STEAD.
Hon. Secretary, Wild Life Preservation Society,
President of the Naturalists' Society.

(i) **Callistemon Protection.**—Mention was made in our last Annual Report that the Minister responsible for the administration of the Wild Flowers and Native Plants Protection Act had been requested to add the species of *Callistemon* or *Bottlebrush*, indigenous to New South Wales, to the list of wild flowers protected under that Act. We are glad to be able to report that that has now been done, so we now have four species—*Callistemon lanceolatus*, *C. rigidus*, *C. acuminatus*, and *C. linearifolius*—on the list of plants protected from 1/7/37 to 30/6/38.

(j) **Local Governing Councils Safeguard Trees.**—In the first issue of our Journal ("Australian Wild Life," Vol. 1, No. 1, p 33) a reference was made by the Honorary Secretary of the St. George Girls' High School Tree Lovers' League to the planting of an avenue of Lemon-scented Gums, *Eucalyptus citriodora*, in 1932, by the fourth-year girls, in Victoria Street, fronting the School. These trees have been carefully tended and watched over by the succeeding girls, until to-day they are a most beautiful sight—a really lovely avenue of gums already in being, although under six years old from the planting of the seed. As these trees prospered, it was seen that it would not be long before they would reach the overhead electric wires on that side of the street, and much anxiety was felt by the girl members of the League lest the trees might share the common fate of tree avenues in city and suburban streets—that is, of being pruned and lopped until they make a very fair representation of a "mop on a broomstick."

It is, therefore, most gratifying to be able to report that, upon representations being made to the Kogarah Municipal Council (which has developed a strong "tree sense"), and through them to the St. George County Council—which controls the electric light and power supply in the district—a special arrangement has been come to by which the overhead transmission wires will be placed otherwise so as not to come into contact with the trees, and so that they will develop their full beauty, to create the most unique avenue of Australian Gums to be seen in Sydney.

This Society has sent its appreciative thanks to the Kogarah Council and to the St. George County Council for their thoughtful consideration, and to the Postmaster-General, telling him of the consideration given to the future of public ornamental trees, and hoping that it would strengthen his own expressed determination to consider the roadside trees and to make provision for their proper untrammelled development, where telephone and telegraph wires and cables were being erected. The Postmaster-General has advised us that he has directed that in the future there is to be as little as possible interference with tree growth adjacent to wires.

4.—GENERAL.

(a) **Memorial to the Late Walter Burley Griffin.**—Since the publication of the last issue of our Journal, Walter Burley Griffin, a member of our Council, internationally known as Town Planner

and Architectural Engineer, has died while carrying out the work for which he went to India. Mr. Griffin had many friends in Sydney and other parts of Australia, and, as the extract from our fellow-Journal, "Indian Wild Life," shows, also in India.

Mr. Griffin was born 24/11/1876 at Maywood, Illinois. He was awarded the first prize for the design of the Federal Capital of Australia, Canberra, in 1912, and was later the Director of Design and construction at Canberra. He was also architect of numerous town plans and community development projects in the United States of America and on the Murrumbidgee Irrigation Area of New South Wales. He was a great lover of the fauna and flora of Australia, and always endeavoured, in his designs, to incorporate as much of the natural landscape and native trees as possible. By his death, Australia has suffered great loss. Our heartfelt sympathy goes out to his widow, who is also very well known here and in India.

The Editor of "Indian Wild Life" writes as follows in Vol. 2, No. 1, of his esteemed Journal:—

Walter B. Griffin is no more! Only recently we published, together with his photo, the "Occupational Conservation"—a most thought provoking article from his pen. He was an architect of International reputation and had made a name for himself as landscape artist and town planner. He was devoted to the cause of Wild Life. Blessed with noble vision, lofty ideals, unassuming personality and simple habits—he was a saint. The world is poorer in losing him and America—the country of his birth, and Australia—the country of his adoption, have received a most terrible blow. He came out to India at the invitation of the U.P. Government to plan out the U.P. Industrial and Agricultural Exhibition. He completed a most difficult task within a record time and the strain proved too much for him, though he was always most able and energetically helped in his work by his very talented, clever and painstaking wife—Mrs. Griffin—a devoted wife and life-long companion. Our heart goes out to her in her sad bereavement, and we offer condolence to his relations and friend. He was closely connected with the Wild Life Preservation Society of Australia, and it was through him that we received excellent literature from the Society for our Wild Life Exhibition. Preservation was the ruling passion in his life, and we are extremely sorry to lose him.

Now that he is resting in Indian soil, his numerous friends and relations would like to join us in perpetuating his memory in India in a suitable form. The form will entirely depend on the amount of contributions received, and the desire of the majority of donors. We open the list with Rs. 25. All donations will be thankfully received by the Managing Editor. Mr. Griffin forged the link of co-operation between the Australian Society and our institutions.

In Sydney, the Castlecrag Progress Association decided to create a special Memorial to the memory of Mr. Griffin by planting an avenue of trees and shrubs along Edinburgh Road, Castlecrag. Mrs. Griffin, when consulted, considered that no form of Memorial could be more appropriate. The Council of the WLP&A decided to co-operate in this project, which was considered by us to be

an excellent one. At the same time, we expressed the hope that, as the choice of trees in such sandstone areas of Sydney is somewhat limited, preference would be given to indigenous local trees, such as the Sydney Red Gum, *Angophora lanceolata*, Rough Bark Apple, *A. intermedia*, Scribbly Gum, *Eucalyptus haemastoma*; Bloodwood, *Eucalyptus gummifera* (*E. corymbosa*); Swamp Mahogany, *E. multiflora* (*E. robusta*); and perhaps Sydney Blue Gum, *E. saligna*. In thanking us for the suggestions, the local committee expressed their agreement with the principle of using indigenous trees.

(b) Pea Rifles and Airguns Used by Children.—All through its history, this organisation has had the most bitter complaints from many sections of the people, because of the use of pea-rifles, winchesters, shot guns, and air guns by boys. Not only do the boys pot at everything that flies, and so, constantly disturb the birds even when they do not actually destroy them, but they are a very great danger to other children, and sometimes, as we have seen often enough, to themselves. Many of the complaints that come to us from citizens rather emphasise the danger to life and limb, and with these we have no official concern, of course, however much we desire to support such complaints and bring them to public notice.

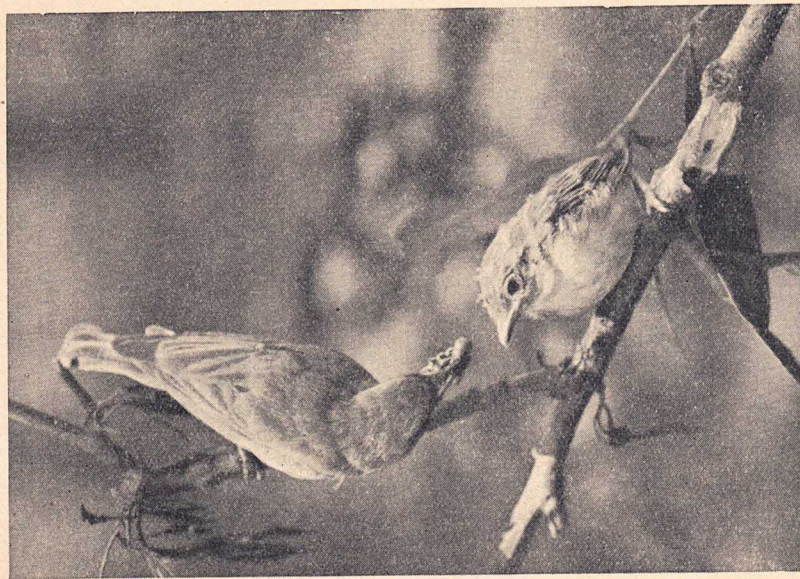
Special mention of this was made at the last Annual Meeting of this Society, when a resolution was passed that the editors of newspapers should be approached and invited to give their assistance during the Christmas season, when parents and guardians would be buying children's gifts—to strongly urge all people not to give such dangerous weapons or toys to the children at all—in other words, to extend the goodwill feeling to our feathered friends of the bushlands. The Secretary's letter conveying this resolution was published in several papers, and brought support and corroborative statements from citizens—terming it a "timely and sensible appeal," and that it "deserved all the support we can give." It was shown again that not only had there been actual destruction of bird life by this means, but also much resultant disturbance of birds everywhere; that many children had invaded bird sanctuaries in a number of places with these weapons, and that there had been a general setback to child interest in wild life preservation.

At the time that we had brought these things under the notice of the people a very important piece of legislation bearing upon the subject had been passed by the New South Wales Parliament, but had not yet come into force. This was the Firearms Act, a proclamation concerning which was published in the Government "Gazette" of 27/11/36, appointing the 1st day of January, 1937, as the date on which it was to commence. As amended by this Act, Section 41C of the Police Offences Act, 1901, provides that:—

No person under the age of fourteen years shall use, discharge, carry, buy, sell, keep or knowingly have in his possession a firearm or air gun, but that this provision does not apply to a person under

the age of fourteen years using a firearm or air gun under the personal supervision of a responsible adult.

We feel that it is of great importance that the general public of New South Wales should be made aware of this legislation, and that the children themselves should be told of it, while being encouraged through their teachers to assist in conservation work. Council decided to invite the co-operation of the Director of Educa-



WHITE-THROAT FLY-EATER OR BUSH WARBLER

(*Gerygone albigularis*)

Adult feeding 12-day-old young.

Common in tree tops. Fine musician.

(Colour: Upper, ashy-brown; Throat, Face, white; Chest, Abdomen, greenish-yellow; Tail, blackish band, white tip).

—Photo, Otho Webb.

tion, Mr. G. R. Thomas, who has done a great deal toward the spread of a love of, and interest in, our fauna and flora, during his charge of the Education Department and the schools of the State. The Director has replied informing us that a suitable notice would be inserted in the "Education Gazette," invoking the aid of

the school teachers generally, and so that the children might be made aware of the law prior to the coming Christmas holidays.

While we have not the space to go into any details it is worth mentioning here that this Act was not passed without very considerable opposition from certain gun-selling interests, and those associated with them, who did not hesitate to use the most unfair, biased, and even ridiculous arguments to combat the passage of the Act.

May we express the hope here that the Police themselves will familiarise themselves with the details of the incidence of this Act. Our reason for saying this is because of a report in the daily press recently in which, after referring to some damage done in a shop at Newcastle by boys with pea rifles, it says: "A policeman heard reports, but thought they were from rifles being used by boys in a neighbouring paddock."

(c) Bushfire Prevention and Control: The article entitled "Fighting the Bushfire: Need for National Organisation," which appeared in our last issue of "Australian Wild Life," excited very wide interest throughout Australia. Many newspapers reprinted it in extenso, and others while printing large extracts from it, made commendatory references, and supported the arguments to the full. This applied particularly to New South Wales provincial press. We have been pegging away at this for many years past in various directions; while, in addition, we have issued many thousands of the Society's envelopes on which was displayed in prominent red type, a general exhortation to prevent fires.

In the last article referred to, it was pointed out, *inter alia*, that New South Wales had an excellent Bushfire Brigades Act, but that very little had been done toward implementing it; and we stressed the following as an axiom:

"It is not enough for Government to pass the Acts, Government must itself see to it that Acts of such widespread public importance are not implemented in any more-or-less accidental manner, but are set in motion, to the public advantage, by the Government."

It is therefore gratifying to note that early in October a Conference, convened by the Chief Secretary of New South Wales, met in Sydney for the consideration of practical proposals for prevention and control. An advisory committee was set up. It was decided to ask all Municipal and Shire Councils in New South Wales, through the Local Government Department, to undertake the establishment of volunteer bushfire brigades in their areas.

It is to be hoped that Government will not let the matter rest here. Local Governing Bodies already know their powers—and perhaps their duties—under the Bushfire Brigades Act; and there is little reason for supposing that this official suggestion or reminder to them will bring any really satisfactory response unless Government sets up an authority to undertake the widespread formation of the Bush Fire Brigades, and to co-ordinate their operations. A lot of brigades in a lot of "watertight compartments," or even isolated

from one another, will be of little service to the community as a whole. May we recommend the article in our last issue to the community for a re-perusal.

(d) Lopping, and Removal, of Ornamental Park and Roadside Trees: It is a perpetual grievance with tree lovers and town planners, that very few trees—native or other—are allowed to develop naturally, in their correct proportions, so as to illustrate their natural habit of growth or their normal stature, when under the care of Local Government and other Civic authorities. There are exceptions, of course, and to these we make apology for the general reference. Some tree planting authorities have an absolute mania for clipping and lopping all trees, regardless of any particular need to make way for lights or wires or other obstructions to their growth. The simile of "a mop on a broomstick" which has often been heard, applied to "Municipal trees," at least is a fair description of many hundreds to be seen in streets and parks. Port Jackson Figs, *Ficus rubiginosa*, Weeping Figs, *F. hillii*, Brush Box, *Tristania conferta*, and many others of equally dissimilar habit—even Western Australian Red Flowering Gum, *Eucalyptus ficifolia*, Sugar Gum, *E. cladocalyx*, and, occasionally, Sydney Red Gum, *Angophora lanceolata*—may be seen in metropolitan, suburban and country areas mutilated almost beyond recognition.

The tendency to remove trees altogether, after a few years of life, is also far too common; and is often done without any reason beyond the idea of making changes or improvements—or what may be passed as such at the moment! Partly, perhaps, this has been due to unwise wholesale planting of certain species in the past. Yet this mistake is being widely repeated on every hand to-day. As an example it may be mentioned that many many thousands of just two species of trees have been planted in the last few years in the metropolitan and suburban areas of Sydney. These are the Brush Box and the Weeping Fig. Most of them have been clipped and clipped again, but the time will surely come when many authorities will be so tired of the sight of such tree monotony (even though individually such trees may be, in their proper development, very beautiful) that they are likely to undertake wholesale removals—as is so commonly done—instead of growing other trees in between or nearby, using the existing trees as "nurses" to protect the growing replacements and to keep up continuity of the arboreal shelters or ornaments of streets and parks.

In Australian towns and cities to-day there are very few planted avenues of indigenous trees attaining the stature or form of bush trees of, say, the same age; and if present unreasoning and destructive habits persist, it is unlikely that we shall see such for many years to come. Even in saying this we must be careful to point out that at least there is a better tree sense among governing bodies in Melbourne and in some of the provincial towns of Victoria than elsewhere in Australia.

During the past year we have been obliged to enter several

protests for the type of mutilation and destruction referred to. At the Council meeting of the Society in August last a discussion centred on the published decision of the City Council of Sydney to remove the very beautiful avenues of Wattles in Hyde Park, although these were and are absolutely in the heyday of their development. It was decided to address the Civic authorities on the matter generally of saving existing trees wherever possible and as long as possible where there was good reason to remove or substitute others. It was suggested also that avenues of more suitable trees for a permanent showing might be planted in the meantime—4 species of Eucalypt and 2 of Angophora being specifically mentioned for their suitability for that location—the existing avenues being used for protection to the rising young Eucalypts, etc.

While Council has noted with pleasure a great increase in civic interest in tree planting in Sydney recently, it has been surprised at the strange choice of species sometimes made—e.g., Elms on narrow footpaths contiguous to high buildings, in narrow streets, and, Rain Forest trees, planted as tiny seedlings, in open streets where the hot winds are free to blast them, without any protection beyond ordinary tree guards. In passing what appears like strictures in cases like these, this Society desires to say that it wants above all to be helpful and to co-operate with all Civic authorities wherever that is possible. Certainly we find no pleasure in merely pointing out instances of misdirected energy or mistaken decisions regarding types of street or park trees. We trust, therefore, that interested Local Governing Bodies will take our comments in the spirit in which they are made.

(e) Soil Erosion and Wholesale Timber Felling: During January many members of this Society were seriously perturbed over newspaper paragraphs relating to the felling of a very large number of trees in one solid "face" on a mountain side in the vicinity of the Craven Plateau, for motion picture purposes. There had been no suggestion that this felling was connected in any way with ordinary economic handling of timbers in the district. Even so, there could still be room for our anxiety. Under the circumstances we felt that a very serious thing was being done. For some momentary financial gain through the creation of a vulgar sensation, trees were to be felled, a steep hillside was to be stripped, and, presumably, another erosion centre would be created. We felt also that whether this was being done on private property or not there was still great public interest at stake. If trees and whole forest areas were to be destroyed for a passing whim then the future outlook for forested lands might be black indeed.

Several members considered that a strong public protest should be made with a view to preventing such useless and wasteful exhibitions; but before doing this it was decided to obtain full information from the New South Wales Forestry Commission. The press boost had stated that the area of trees felled covered 60 acres. The enquiries of the Forestry Commission, through their local For-

ester, revealed that the area was a Conditional Purchase in the hands of a Sydney Theatre advertiser. It was situated in mountainous country, and covered about 4 acres! About 200 trees, mostly brush-woods, were felled. At the time of the visit of the Forester the ground cover still remained. He reported that assuming that the landholder did not intend to clear the area of this cover, acceleration in the rate of erosion should not ensue.

While we see that this case was not nearly so serious as it appeared from the enterprising publicity of the motion picture producers, the principle at stake is a most important one, while the potential consequences of such uncontrolled action by citizens are of the most serious kind. For our enquiries elicited the information that the Forestry Commission has no jurisdiction over timber on Conditional Purchase lands; such areas being in the same category as freehold lands. This means that the bad old policy of allowing our private citizens to do what they like with many of our forested lands, still persists, regardless of the consequences in soil erosion, vastly decreased productiveness of the land, sedimentation and silting up of watercourses, decreased water conservation, spreading of dust-producing areas and of general aridity in the country, undue interferences with our fauna and flora and all the many concomitants to a rash, careless and unthinking go-as-you-please and every-man-for-himself policy which have caused such great destruction throughout Australia. That we should still allow such things to occur, is all the more unbelievable, when we consider the many public and official discussions which have taken place in recent years with a view to limiting, even preventing, future erosion centres from forming, and which have caused the State of New South Wales to go so far as to set up a special division of the Department of Mines to deal with such matters.

We would invite the Australian Press to give special mention of this item, with a view to drawing public attention to the urgency of the problem which it raises.

(f) Schools Branch, Australian Forest League: Apart from the regular useful work that is put in by the Australian Forest League senior body in tree planting and conservation, the work of the Schools Branch through the schools of New South Wales has been most outstanding, and shows promise of very great developments. Indeed, sufficient has been accomplished already to justify the view that the work of this Schools Branch, which is a league of Junior Tree Wardens, is destined to be a major influence in the cultivation of understanding and love of trees, as well as in the actual preservation work, and arboriculture itself, in Australia.

The work of the Junior Tree Wardens is carried on through the schools, with the official recognition and full support of the Department of Education in New South Wales and with much co-operation from many public school teachers. When these small tree wardens in the schools link up with the work, they take the following pledge:

"I promise that I will not willfully destroy, but will protect our trees and shrubs in every way." Practical ways in which the Junior Tree Wardens carry out their pledge, are as follows:—

- (1) By caring for plants already in the district.
- (2) By planting trees and shrubs wherever possible for shade, beauty and use.
- (3) By making other people interested in the preservation and establishment of beautiful trees and shrubs.
- (4) By co-operating with other local bodies in works of afforestation or re-afforestation and tree planting generally.
- (5) By acquiring a knowledge of trees and shrubs which will be of value in their cultivation.
- (6) By learning to propagate trees and shrubs.

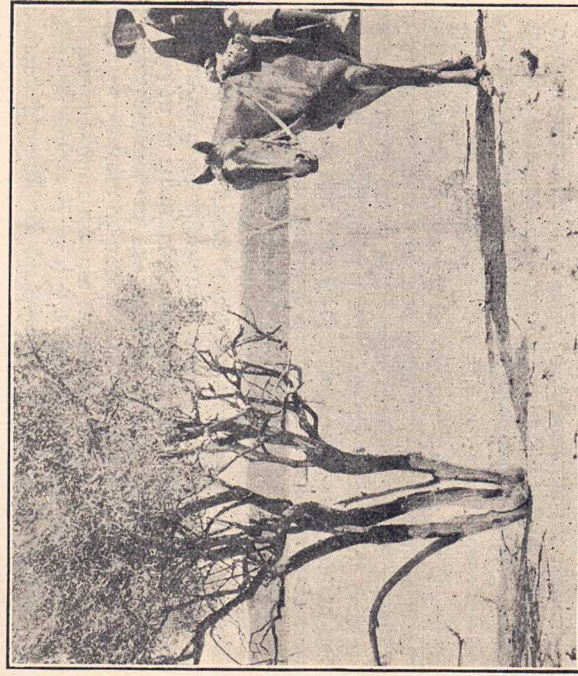
Reports show that over 2,000 schools are already taking part in this work. The total number of Junior Tree Wardens enrolled to date is 127,000! Of these 32,000 have come in during 1937 (to mid-November). 740 are Life Members. It is impossible to record, in passing, here, even a few of the remarkable things already achieved in the work of this Schools Branch of the Forest League work. We recommend members and friends to study the first issue of "The Junior Tree Warden" (May, 1937), which gives an account of the tree planting activities in the schools. For the 1936 season alone approximately 33,000 trees were planted in school grounds, 4,000 in parks and reserves, 5,000 in streets and highways; while 50,500 trees and shrubs were propagated in school nurseries. Even the children connected with the Correspondence Schools have joined in this wonderful movement, 2,500 of them being enrolled and many hundreds of trees planted by them.

Many of the schools have developed special tree-planting projects—some of them of considerable forestry importance, while others have undertaken the planting of parks and public places on an extensive scale. Tumut school has 7,500 Pines under cultivation, some already up to 30 feet in height. There are now 46 schools with economic forest areas attached to them—varying from 3 square chains up to 80 acres. Redbridge, a small country school of only 28 pupils, planted 1,011 Pines last year.

Some of the school plant nurseries are doing wonderful work, turning out large numbers of seedlings of Eucalypts, Acacias and many other native and exotic trees to supply schools and even the needs of public bodies. At St. George High School, Kogarah, is a model nursery, though necessarily small; at Riverside Domestic Science School is a fine nursery and propagating house (unfortunately termed there an "arboretum," a name only properly applied to an area covered with trees, or used for the setting out of various species of trees). Scone Public School issues from its plant nursery quite an imposing list of trees and shrubs available annually, to be sold at low prices (through the local Parents' and Citizens' Association) to other schools. The 1937 list showed over 6,000 plants of more than 75 species (trees and shrubs) available for distribution—surely a living testimony to this grand work.

One of the direct outgrowths from this work among the children is the formation of Leagues of Junior Tree Lovers. A still further development is to be seen in the formation of groups such as the Illawarra-Bankstown Federation of Junior Tree Lovers, which is a federation embracing all School Tree Lovers' Leagues in the district. This is a natural kind of district development from local junior tree groups, which we would commend strongly to other districts of Australia, as it makes for the undertaking of greater and more co-ordinated schemes within a large area, while providing mutual support for the various school groups.

The Honorary Secretary of the Schools Branch of the Australian Forest League is Miss Thistle Y. Harris, B.Sc., at St. George



Rabbits prevent natural regeneration of indigenous trees. They also ringbark large areas of inland trees during droughts, after clearing out the grass and herbage. Note how the bark of this White Orange tree (Capparis) has been eaten off.

Girls' High School, Kogarah, N.S.W. Miss Harris is also the Honorary Editor of the excellent and quite unique publication "The Junior Tree Warden."

The Wild Life Preservation Society desires to express its earnest appreciation of a movement which has made such amazing strides in such a short period of time—a movement which will go far toward that goal which every wild life conservationist works to; the time when the people's united understanding and will, shall have made repressive laws for the preservation of fauna and flora almost unnecessary.

(g) **Splendid Services of ULAWS, London:** The University of London Animal Welfare Society and ourselves have maintained connection during the period under review. This organisation, well known as ULAWS, is one of the most virile animal welfare movements in the world to-day. Its work has always been characterised by a distinguished thoroughness and scientific exactness, which is sometimes absent from such worthy causes. Too many are prompted by an unreasoning emotionalism rather than upon reasoning and well-authenticated fact. Because of its strength in the ways indicated we value our association with ULAWS very highly, and trust that it will long be maintained, to the mutual advantage of our separate movements and of the main cause for which we both stand. As ULAWS well says in its Prospectus: "The 'animal movement' needs the help of minds trained in the discipline of accurate thinking, for all good causes are liable to be prejudiced by uncritical zeal." ULAWS is conducting a splendid campaign in Great Britain against the use of the cruel Gin Trap for Rabbit destruction. This form of trap is probably among the most brutal devices extant to-day, in the capture of the Rabbit. This Society (WLPSA) in its Australian work, has often condemned this Gin, of which hundreds of thousands are used in various parts of our country. Except indirectly, however—insofar as its brutalising effect upon many young Australians militates against all animal protective work—the Wild Life Preservation Society is not able to concern itself as some of our members desire. We are vitally interested in the destruction of the wild Rabbit in Australia, of course, as it has spread and maintains itself largely at the expense of certain parts of the Australian flora, while also usurping many feeding areas, which might still sustain ground fauna that has been displaced. (As far as the man on the land is concerned, the Rabbit is still far and away the major pest animal).

But many methods of Rabbit destruction which have been practised in Australia—poisoning, trapping by gins and other devices, and even dogging, have been responsible for immense losses of birds and ground fauna. The Honorary Secretary of this Society (WLPSA), working in another sphere—as Special Rabbit Menace Commissioner—has, in his official reports and other publications, particularly drawn attention to the comparative uselessness (for extermination) of nearly all the old time methods of rabbit destruction, when considered in any long-range view, and has also shown their destructiveness in other directions. He has specially recommended the use of fumigation of the Rabbit (in burrow, warren, excavation, rock crevice and log) as at once the most effective means and the most humane—the fumigant being Cyanogas or Calcium Cyanide dust.

After many tests, made under the most exacting conditions in England by scientists of the University of London Society (ULAWS), the Society determined to give its unstinted support to Mr. Stead's recommendations and to the distribution of his pub-

lications. The gas evolved from the Cyanogas dust, pumped into the burrow, kills the Rabbit practically instantaneously, without torture or fear and without pain; but does not kill other forms of wild life, as happens when poisons and traps are used on the ground or at the entrances to burrows and warrens. Several other humane organisations have also given their support to these suggestions, where the pest animal burrows into the ground.

The Honorary Secretary apologises for mentioning any results of his own work here, but feels that it is necessary in the interests of adequate and merciful destruction of a pest, while preserving the wild fauna that is our special concern.

(h) **Nature Protection in Poland:** Among our valued international correspondents is the State Council for the Protection of Nature in Poland. This body is charged with the constructive work of preserving the native fauna and flora; of restoring such by practical control and oversight and direct breeding, where necessary; of studying the needs of every district of Poland for Nature Protection, and so to make recommendations to the Government on a general well-thought-out co-ordinated plan; of preserving individual trees, buildings, rocks, geological features and scenic features—all of which is done with the organised aid of experts and specialists in many departments of the Polish national life, under the one highly expert control. Continuous investigations are carried out regarding every section of the work, both at headquarters at Krakow and at provincial centres.

Since the State Council began its labours in 1919 there has been a great increase in the number of reservations, and in their total area—from 29 reservations, of only 1469 hectares, in 1919, to 180 reservations totalling an area of 28,478 hectares in 1936 (1 hectare equals nearly two-and-a-half acres). These reservations for various purposes are additional to the formation of seven great National Parks and over 4000 Nature Monuments covering the whole gamut of the State Council's responsibilities and the ramifications of their work. With the benevolent co-operation of the Polish school authorities, the protection of Nature is now introduced in all schools and colleges, from primary ones to the Universities.

We would like to have given some instances of the recent work of this State Council, but for the limitations of our space. Some of the individual trees set aside as Nature Monuments have been more than one thousand years old. The near-extinct European Bison are being bred out, ancient historical buildings are being secured, and a hundred-and-one other matters of preservation are attended to, as they may only be done under the aegis of a State Department set up and organised for that purpose.

Might we not model our own oft-proposed State Council for Nature Protection on similar lines!

(i) **Parks and Playgrounds Movement.** This excellent organisation, with which we are affiliated, continues to do great work in

fighting for the protection and preservation of park spaces, public reserves and playgrounds, the setting aside of viewpoints and the preservation and widespread planting of trees. Especially commendable is its continued fight for the setting up of a central parks and playgrounds public authority, with a view to a better control of existing reserves and national parks, a co-ordinated system of direction, and prevention of the constant attempts to filch portions of the public domain in one direction or another, for reasons and purposes altogether alien to their originally intended use. One of the aims of this movement is contained in their slogan, "a green belt of parks for Sydney." Official enquiry by a Committee of the P.P.M., in consultation with the New South Wales Lands Department, showed that Sydney was some 4000 acres short of such park lands, according to minimum town planning standards. We would like to see a similar movement for the protection of parks and playgrounds in the other States.

(j) **"Indian Wild Life."** Our colleagues of the All India Conference for the Preservation of Wild Life, who were responsible for the Wild Life Preservation Exhibition at Lucknow from 5/12/36 to 4/2/37, are ably continuing their splendid work by means of their fine publication, "Indian Wild Life," which comes to hand from time to time. Vol. 2, No. 2, for April, May and June, 1937, contains many interesting and useful articles which indicate the pushing forward of the work. The President is Raja Sahib Bahadur of Mahmudabad. Joint Hon. Secretaries are Major J. Corbett and Mr. Hasan Abid Jafry. Mr. Jafry, who is a well-known barrister, is the Managing Editor. We wish the All-India Conference every success in its praiseworthy attempts to provide a common platform to all the Indian Provinces and States for the preservation of the wonderful fauna and the glorious flora of Great India—which, until the advent of modern civilisation, might fairly have been termed the home of wide life conservation.

(k) **International Office for the Protection of Nature.** This office, which has carried out consistently fine work for many years past, has continued its publication of legislative enactments, ordinances and regulations of the various countries, concerned with the Chase, Fisheries, Administration of Forests, National Parks, Nature Reserves for the Protection of Fauna and Flora and National Monuments. The latest issue contains the Legislation of Equatorial Africa for the years 1925-1929, inclusive. This organisation is getting together, through its publications, the most complete library of conservation laws yet published.

(l) **Other Organisations Abroad.** There are many organisations in other countries and in other parts of the British Dominions whose work lies in the same direction as our own, or at least partly covers such work. Most of the animal protection societies in other countries associate themselves also with some part of wild life preservation work. At one time or another we come into close contact

with these, but lack of space here prevents us from dealing with their work or ways in which we contact them. We should mention, however, several of these: The Forest and Bird Protection Society of New Zealand, whose President is an old member of this Society, Captain E. V. Sanderson, publishes quarterly a useful and beautifully printed journal, "Forest and Bird." Then there are: The Society for the Preservation of the Fauna of the Empire, the Royal Society for the Protection of Birds, the National Society for the Abolition of Cruel Sports—the last two in Great Britain, fighting mainly against the outrageous "blood sports" which are a cruel legacy from past times. As may be seen elsewhere also we have co-operated with the RSPCA in London in important work, while the SPCA in Scotland has also been in communication with us. The International Journal of Animal Protection, of which Mr. Lyndesay G. Langwill is the Editor, has assisted us. We would like to mention also the Council for the Preservation of Rural England. They publish, in England, an extremely useful and well-edited journal, "The Tree Lover," a quarterly magazine—in the 1937 Spring and Summer number of which appears a very kind reference to our own work. In Europe several official or other public organisations have been in contact with us, while in America we have as our co-operators the great National Park Service at Washington and the American Committee for International Wild Life Protection, whose office is at Cambridge, Mass. The national publications issuing from Washington are invaluable to all conservationists, while the ACIWL is producing a fine series of monographs dealing with Nature protection in various countries.

(m) **Proposed "Bird Park" at Wentworth Falls.** In further reference to this matter—mentioned on page 20 of our last report—we are glad to be able to report that the scheme fell through. Even if only "unprotected" birds had been exhibited in such a place, as a Tourist Attraction, the immediate effect would have been, as always, to add to the widespread habit of caging and otherwise confining birds, whether protected or not. As one of our local members put it: "the birds are saved after all from a lifelong imprisonment."

(n) **Sale of Bird Lime in New South Wales:** Recently one of our members drew attention to an advertisement in a Sydney weekly journal, offering Bird Lime for sale and a "book on bird-trapping." Although it is illegal to traffic in this substance in New South Wales, the Honorary Secretary wrote privately to the advertiser in Queensland sending the amount named, and, on the information so obtained, placed the matter in the hands of the Chief Secretary. Action is not concluded on this case. In the meantime the journal concerned has been informed as to the law and has been asked not to accept any such advertisement.

(o) **Sarcoptic Mange Affecting Wild Fauna:** Mr. D. F. Gray, Veterinary Research Officer at the Glenfield Station, New South Wales, has recently reported on the occurrence of this parasitic skin

disease, caused by the Mange Mite, in the Wombat. Part of a skin sent from Braidwood, N.S.W., was found to be heavily infested with the mite *Sarcoptes scabiei*, responsible for a similar condition occurring in Australia in Dogs, Horses, Pigs, and, rarely, purely temporary infections in Man through frequent contact with infected animals. Field reports attribute heavy mortality amongst Wombats to this disease, claiming that "where five years ago these animals existed in thousands they are now very scarce indeed."

(p) Postage Reduction Needed: At the end of 1936 a body called the Postage Reduction League was formed, with the object of gathering general public support for a campaign to influence the Commonwealth Government to bring about a general reduction in postage rates to facilitate the work and the culture of the people-at-large—especially having in view the large profits made by the Postmaster-General's Department, which has always been nominally a non-profit making Department. Among other bodies, this Society was invited to join forces with the Postage Reduction League; to which the Council willingly agreed.

After several attempts to arrange a combined deputation of representatives of the various sections and interests of the people, a deputation was received by the Acting Prime Minister, the Rt. Hon. Dr. Earle Page, M.H.R., on July 19. Those present represented: (1) Tasmania: the State Government, the City Council of Hobart and Mercantile Associations; (2) Victoria: 13 Mercantile, Professional and Women's Associations; (3) New South Wales: 26 Mercantile, Professional, Scientific, Conservation and Women's Associations, as well as 87 Municipal Councils and 37 Shire Councils. Altogether these represented (exclusive of Government and Municipal representatives) several hundreds of thousands of taxpayers.

So many interests being represented at this Deputation, made it impracticable for the specific point of view of all to be put forward. As it was felt by this Society that we represented a section of citizens, working for the common weal, who were very adversely affected by existing high rates of postage, Council decided to put the case of such organisations specially before the Prime Minister. Accordingly a letter was sent showing how such were retarded in their work for the people throughout the various States of Australia. In the course of this letter we said:

The Parks and Playgrounds Movement, the Naturalists' Society of New South Wales, the Australian Forest League, and the Wild Life Preservation Society of Australia are typical of several Australian bodies, all of which have small funds, very low annual subscriptions; and all have a very hard struggle carrying out what is truly the conservational or educational work of the nation. A very large percentage of their income goes into the Post Office. If the postage rates for letters, circulars, and printed matter were, say, half what they are to-day, then it is certain that the usefulness of the organisations would be about doubled. As you will be aware such societies' annual subscriptions are not of an elastic nature—to be altered, say, with varying rates of postage. (The WLPFA sub. has been 5/- per annum since its inception in 1909.)

Culturally, our Australian population is rather starved, we think, and one agency that helps to maintain such a condition is high postage. Will you kindly try and give us some relief.

In reply to this Mr. Lyons stated that he would discuss the matter personally with the Postmaster-General, and, later, sent us a report from Senator McLachlan (then P.M.G.) regretting that the way could not be seen "to give any undertaking that it will be possible, in the immediate future, to alter the rates at present in operation." There the matter ends for the moment, but we urge our members and friends of all cultural organisations to continue the fight and to bear in mind that during the last five years alone nearly £10 millions of profit have been taken out of the people's pockets in this direction and merely paid into consolidated revenue instead of easing the postal burden and promoting education, culture and intercourse of the people, both among themselves and with those abroad who are so important to our cultural and economic advancement.

(q) Proposed Metal Brooch Badge for Hon. Rangers: During the last few years we have heard a good many complaints from various Honorary Rangers under the Birds and Animals Protection Act and the Wild Flowers and Native Plants Protection Act in New South Wales as to the inadequacy of the type of warrant supplied to such Rangers. With a good deal of handling or even pocket wear and tear the present folder warrant soon gets tarnished and worn.

It has been suggested to the Government authorities that a metal brooch badge in the shape of a shield or a disc about an inch and a half diameter—something which could be worn pinned inside the coat or under the lapel of the coat ready for immediate inspection when required—would be a more useful thing and might often save slight misunderstandings.

Our experience is that very few of the Honorary Rangers wish to make a "display" or show a desire to be officious, and it is thought that if a badge could be exhibited quite incidentally, without ostentation, when remonstrating with people who are (often unwittingly) breaking the conservation laws, it might greatly conduce to effective scouting work.

5. OURSELVES AND MEMBERSHIP.

(a) Members' Subscriptions: *May we make a Special Appeal to all Annual Members to keep up their subscriptions as regularly as possible.* Our expenditure during the past year has been the heaviest on record in our Society's history. We would like to undertake many schemes for setting aside Sanctuaries and National Monuments, under the direct aegis of the Society, if funds would allow. Our work is not for to-day alone, but for the near, and even distant future as well. Our work has—as so many commentators have said in the past—a truly nation-wide appeal, yet it is impossible for us to prosecute it as we should, merely upon our popular commendation.

tion, unless such induces a corresponding amount of financial aid.

(b) Special Subscriptions: While perhaps the most satisfactory form of financial help is in the form of regular annual subscriptions, we appeal also to members to influence the giving of Special Subscriptions, or the setting aside of Legacies, wherever possible. The receipt of the sum of £78/7/- from the estate of the late councillor William Cope, was a determining influence in the Council's decision to purchase the land at Avalon now known as "The Angophora Reserve." Wherever members feel that it is practicable for them to do so, also, we would be glad if they will change over from Ordinary Annual Membership to Life Membership (Men, 5 Guineas; Women, £2/12/6).

(c) Corporate Membership: May we remind members and friends that we have three forms of Corporate Membership: (1) Corporate Life Membership, at 5 Guineas, which may be taken out by Local Government and other Public Bodies or Associations; (2) School Corporate Life Membership, at £2/12/6; (3) Annual Corporate Membership, at 5/-, which may be taken out by Public Bodies or Organisations or Departments of Government. In these cases it is usual to nominate some officer through whom the subscription may be paid, and to whom correspondence may be addressed.

(d) Two New Corporate Members: We are very glad to welcome to our list of members two most important organisations which have linked up with us during the past year. The first was the Queensland Government Forest Service (Forestry Sub-Department), whose headquarters are at Brisbane, and the second, the Public Library of Victoria, with Mr. Ernest R. Pitt, the Chief Librarian, as its representative, in Melbourne. The Queensland Forestry office has done very great work for many years past in forest conservation and regeneration, and has always been a friend to general conservation work. The Melbourne Public Library plays a most important part in the education of and general intellectual advancement of the Australian citizen; it is therefore very gratifying to know that we have their earnest co-operation in a movement which we believe is of such great importance to present and future Australia.

(e) District Representatives of the WLP&A: Many members do continuously good work for the Society and/or the cause, so that it becomes a little difficult to single out a few without undue comparison with others. Some members have—by their quiet persistence and by example in their own districts—brought about a great change locally in the attitude toward the preservation of our bushland floral and faunal life. The Council desires to thank all members who are actively working for our movement. Outstanding work which has come under our notice in recent times has been that of Miss Merle Schwenke at Gilgai, Miss Jean Colditz at Crookwell, Miss L. L. Banfield, of Ararat (Vic.), Miss Daisie McCulloch,

at Dubbo, Mrs. Ida M. Dalziel, of Atherton (Qld.), Mr. Amos Williams, at Berridale, Mr. C. E. Ford, at Walkerton (Qld.), and a number who are working in the metropolitan areas.

(f) "Australian Wild Life" Widely Appreciated: Distribution of our Journal has gone on over a wide field. Council feels that this circulation of some of the details and results of our work, and the resultant widespread friendly publicity, is of major importance in the pursuit of our aims for the preservation and the re-creation of the fauna and flora, and the saving of scenic and outstanding geological features of Australia. Still, **much more could be done, if we were furnished by the people with sufficient financial resources.** May we impress this on friends.

"Australian Wild Life" is despatched to every metropolitan and provincial newspaper in Australia, to many journals, institutions overseas, to a large number of scientific, conservation, biological and other organisations and official institutions in Australia, to many Government Departments in several States, to Public Libraries and, of course, to our members. Full permission is given to editors of journals generally to quote as fully as they like from our Annual Reports and special articles—even to the extent of reprinting whole articles and reports. This has been widely availed of—frequently to a surprising extent—indicating the prevailing esteem for the importance of this work. Many references in these Australian and Overseas journals and in the letters of societies and institutions of all kinds, as well as in the correspondence from many members and friends, bear witness to the public appreciation of our efforts and of the great necessity for the most urgent prosecution of such work. We would like to have made a selection from such testimonials but space forbids. It is very evident, from the nature of many printed references, that there is a very widespread love of the bushlands in Australia, notwithstanding what may appear on the surface at times, when callous vandalism rears its ugly head.

During the last year Australia was favoured with a visit by a number of prominent educationists, who travelled here to attend the sessions of the New Education Fellowship Conference. Each delegate was furnished with a set of our publications which were greatly appreciated. The teaching of Nature Study and its concomitants of fauna, flora, and scenery preservation, are being increasingly recognised in the world as an essential part of education.

(g) Thanks to Metropolitan and Provincial Australian Press: The Society wishes to particularly thank the newspapers and other Journals, which, to the number of several hundred, have lent their aid, during the past few years, in spreading a knowledge of our work, and the things which we stand for.

(h) Thanks to Auditor: We wish to give our best thanks to our Honorary Auditor, Public Accountant Mr. K. A. Mackenzie, for his kind assistance to us.

Wm. GEO. KETT,
President.

DAVID G. STEAD,
Hon. Secretary.

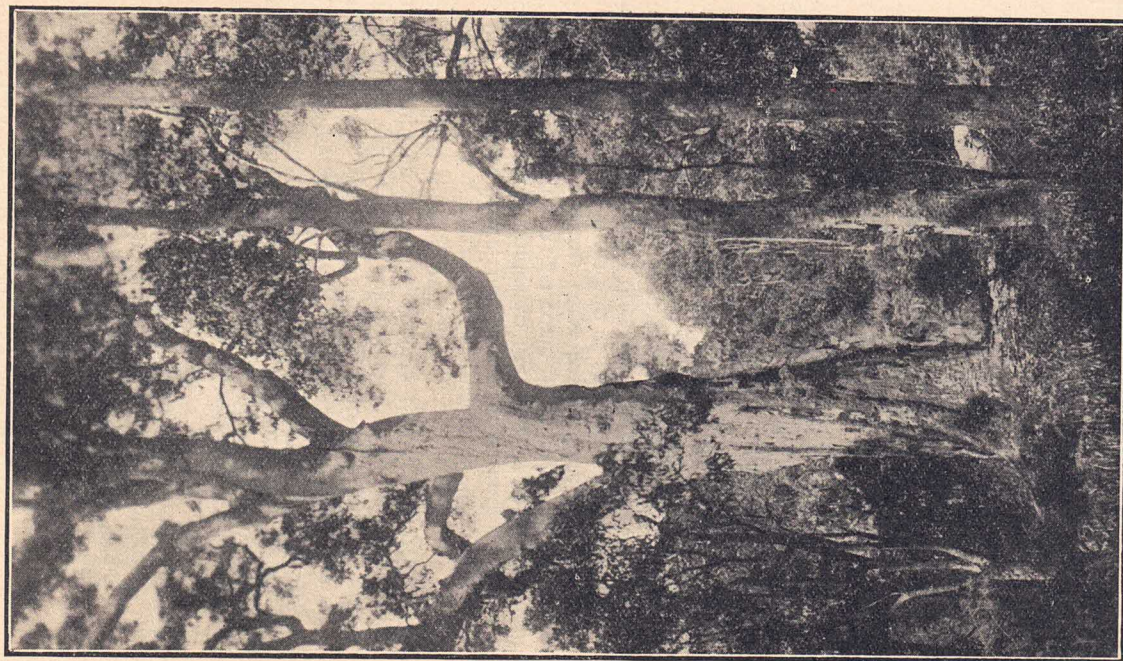
THE ANGOPHORA RESERVE. SOME NOTES ON THE FLORA.

By THISTLE Y. HARRIS, B.Sc., Honorary Curator.

These notes have been compiled after only the most cursory examination on the flora of the Angophora Reserve, and must not be taken as anything more than a preliminary observation of the botanical features of this area. It is hoped that as time and opportunity permit, further investigations and identifications will be made and the result published, so that in time we may possess a fairly complete census of the plants living there. Whilst the main object of the acquisition of this reserve is to preserve the wonderful specimen of Sydney Red Gum in a setting suited to its majesty, nature lovers and botanists in particular will revel in this delightful and interesting spot. In a small area of six and a half acres it has been possible to include examples of the two most outstanding geological formations of the Sydney district, each supporting a characteristic flora. On the plateau the first layers of the Hawkesbury Sandstone overlie the shales of the Narrabeen series. Below the steep sandstone cliff the shale has no topping of sandstone, and so carries its own type of vegetation; although, of course, there is a considerable amount of merging of the two types. Erosion from the plateau and seepage of water, keep the lower portion of the area supplied with a certain amount of plant food material.

The sandstone plateau is characterised by the presence of two outstanding tree species, **Sydney Red Gum**, *Angophora lanceolata*, and **Scribbly Gum**, *Eucalyptus haemastoma*. Since this area is elevated and unprotected by other land masses it is subject to severe winds. On this account the two species mentioned show twisting and distortion of the limbs which render them extremely picturesque. It is this power of adaptation to exposure which has made these two Gums the predominant species on so much of our exposed Hawkesbury sandstone. Indeed, some of the Scribbly Gums here have been bent until the main stem lies almost parallel with the ground surface yet they maintain a sturdy hold in the soil and continue to live and grow. Their smooth white stems and coarse dark green shining leaves are specially attractive.

The Red Gum, in addition to its capacity for bending with the wind and maintaining its position in the most exposed areas, possesses another character which makes it successful on certain of the sandstone areas where there is practically no soil and the rock comes right to the surface. This is the plastic nature of the wood during its period of growth. If the stem is unable to grow erect on account of the rocky nature of the ground, the lower part of the stem, or the upper part of the root, will spread itself over the surface of the rock and so add to the support of the tree—in addition to assisting in pulverising the rock and so increasing the food material content of the soil. Many examples of this extraordinary habit may be seen on this area.



A GLIMPSE OF THE GREAT ANGOPHORA IN ITS FOREST SETTING.

—Photo by H. R. Harrington.

branches, penetrates into the shale below. It, too, is a small tree, and its pendulous habit lends a touch of daintiness to its somewhat harsher associates among the shrubs.

In the better soil of the shale area below the cliff face some very fine trees stand. In addition to the huge Red Gum, which occupies a splendid position at the foot of the slope, there are some fine straight specimens of **Spotted Gum**, *Eucalyptus maculata* Both the Spotted Gum and the Red Gum are at their best in late December and January, when the old bark is falling. At this time the Red Gum displays the most exquisite shades of red, purple and pink in its stem, and merits the name Blood Gum by which it is known in the Warialda district, where it occurs on a sandy outcrop. (On the heights it merits another picturesque Warialda name, Tumbledown Gum). At this time, too, the Spotted Gum is more spotted than at any time of the year, the dry scaly patches of old bark forming a delightful contrast to the tender fresh green of the newly exposed portions. Later in the year when all the old bark has been shed and the stem is quite smooth the name Silver Lady sometimes given to this tree is readily understood. Other trees of this sheltered portion are **Brown Stringybark**, *Eucalyptus capitellata*, and **Grey Gum**, *Eucalyptus punctata*. Several other species have been observed. These will be listed later on, when material has been collected to permit of verification of the species.

The Broad-Leafed Geebung, *Persoonia salicina*, is a common feature of the lower slopes. Its delicate red-tipped young foliage is very beautiful, and its habit of twisting its leaves on their petioles to avoid the direct rays of the sun, makes it of special interest to the botanist. Another beautiful plant of the lower slopes is the **Native Holly**, *Oxylobium trilobatum*.

On the sandstone section the undergrowth is mostly restricted to small xerophytic shrubs and a few annuals, but in the lower area several larger shrubs make a conspicuous feature of the vegetation. These include:—

Native Cherry, *Exocarpos cupressiformis*, a very lovely shrub with drooping delicate green branches, resembling the Cypress, and bearing quaint, red fruits. It is a root parasite, its roots creeping along the ground not far below the surface and tapping the roots of other plants to obtain its food material.

Black Wattle, *Acacia irrorata*, which flowers in December. It has feathery or bipinnate leaves, and balls of soft, pale yellow with a very delightful perfume.

Woody Pear, *Xylomelum pyramidalis*, which bears rich red young foliage and quaint woody follicles, in shape like the edible pear, but bearing two large winged seeds.

Bottlebrush, *Callistemon rigidus*. This species deserves special mention, for, while being one of the choicest of our several Bottlebrushes, it is now one of the rarest, although at one time it was fairly common. It is of special interest to know that a few plants of this Bottlebrush occur on the reserve, where it has a reasonable chance

In several cases, the wood has penetrated cracks or natural layers of rock and forced its way between. The continued growth of the roots in a lateral direction has then forced the rock apart. By this means the roots have been able to travel to new feeding grounds, while the additional weight of rock on the roots seems to increase the stability of the plant in the soil. That this plasticity of the wood is due, at least in some cases, to irritation of the living tissues, is shown in two very interesting instances on the top of the rocky projection which marks the edge of the sandstone in this region. In the first case a Red Gum with its main stem growing erect and straight, on account of the fact that it is sheltered by the cliff face, has come in contact with the projecting ledge of a sandstone cave. Continual rubbing as the stem grew has caused this strange growth of additional tissue while the stem continued to grow in height. The result is a tree with a single main stem bearing on one side an extraordinary protuberance which appears to be supporting the rocky ledge round which it has grown.

The second case is even more unusual. A Red Gum, also protected by this same ledge, has grown erect and put out a lateral branch almost at right angles to the main stem several feet from the ground. This branch has come in contact with the main stem of a **Bloodwood**, *Eucalyptus corymbosa*, where irritation again appears to have caused a spreading of the growth of the wood in this plastic manner. The contact does not appear to have affected either tree to any marked extent; so that both have continued to grow beyond this point, as has also the branch of the Red Gum which put forward the additional tissue. So intimate does the contact appear, that it would seem—at least on one side—that the cambiums of the two trees have knitted and so formed a natural graft. Closer investigation, however, may reveal that the Red Gum tissue is simply spread over the surface of the Bloodwood without making contact with the living cells.

Of these two species, the Scribbly Gum is confined entirely to the sandstone plateau. The Sydney Red Gum is to be found, however both here, and in the shale area below. On the top both trees are small, not attaining a height greater than twenty five feet. In the richer and more sheltered lower regions the Red Gum grows to a great height, and it is here that our special giant resides.

Other trees on the sandstone are: **Bloodwood**—with rough, almost stringy, bark, and a mass of beautiful white flowers regularly in January or February on its stunted branches. **Red Honey-suckle**, *Banksia serrata*, which grows mostly on the rocky ledges at the junction of the two geological formations and is extremely twisted and gnarled. A single specimen if **Port Jackson Fig** *Ficus rubiginosa*, was also observed on one of the rock ledges. Two species of *Casuarina*—the coarse stemmed **She-Oak**, *Casuarina stricta*, and the **Forest Oak**, *Casuarina torulosa*, both occur on the sandstone ridge. The former, a small tree, is confined to this region; while the latter, readily distinguished by its slender, graceful, drooping

of preservation. It has recently been added to the list of Protected Wild Flowers and a description of it will be found elsewhere in this issue.

Many small shrubs occur in the sandstone and many of these too penetrate into the shale area. Among these are:—

Honey Flower, *Lambertia formosa*, with its stiff honey-laden red flowers in November and December, which attract a host of small honey-eating birds. It does not penetrate very far into the shale.

Golden Banksia, *Banksia collina*, a rather unusual Banksia for this district. It grows to a height of four or five feet, but is mostly smaller here. Its flowers, which are open in September, are a golden yellow colour and very attractive. It is another bird attraction as it also bears abundant honey. It is far more common on the Central North Coast of New South Wales and close to Melbourne than it is in Sydney.

Pink Spider Flower, *Grevillea sericea*, which is only found on the sandstone.

Sweet Scented Wattle, *Acacia suaveolens*, a pale early spring flowering type, which loves the bare sandy ridges.

Prickly Wattle, *Acacia juniperina*, growing on both formations, flowering in October and November, and bearing pale yellow balls of flowers. The phyllodes are very pungent pointed, hence its name.

Golden Pea Bush, *Gompholobium latifolium*. This is one of the most beautiful of the native peas, with great yellow flowers with a standard an inch in length and flowering profusely in September and October. There are quite a number of plants of this on the shale.

Platylobium formosum, another of the yellow pea flowers which grows on both shale and sandstone. It flowers in November and December and is readily distinguished by the flat pod which is formed later. The dark brown keel makes the flowers most attractive.

Eggs and Bacon, *Dillwynia ericifolia*, with its masses of yellow pea flowers in August and September, is fairly abundant in both formations. The leaves are fine and rather prickly.

Hovea linearis, a purple pea flowering in August and September and found here on the shale.

Phyllota phyllicoides, another yellow pea flower flowering in November and December and confined to the sandstone.

Sydney Boronia, *Boronia ledifolia*, flowering in June and July and bearing deep pink flowers.

Feathery Boronia, *Boronia pinnata*, with feathery pinnate leaves and pale pink flowers and blooming in September.

Tea-Tree, *Leptospermum flavescens*, bearing masses of white flowers in September and October. It is restricted to the creek bed and so is not common.

Kunzea corifolia.

Native Hops, *Dodonaea triquetra*. *Pimelea limifolia*.

Quite a large number of annuals and other small plants occur on both formations. While not forming a very conspicuous feature of the vegetation many of them are individually charming and of considerable botanical interest. Among the Monocotyledons are found grasses, rushes (along the creek bed), lilies, irises, and orchids. The greater number of these will be omitted from this report and will be dealt with later but some may be mentioned. Among the lilies occur the following:—

Dianella revoluta, with its blue flowers and berries.

Giant Christmas Bell, *Blandfordia grandiflora*. It is worthy of note here that a specimen of this grand bell was observed, bearing fifteen bells of specially fine size on the one stem.

Burchardia umbellata, with dainty white flowers on a single stem.

Fringed Violet, *Thysanotus tuberosus*, with purple fringed petals.

Giant Grass Tree, *Xanthorrhoea arborea*, and the smaller *Grass Tree*, *Xanthorrhoea australis*.

Xerotes longifolia and *Xerotes flexifolia*.

Schellhammera undulata.

Most of these are found in flower in late November and December.

Among the orchids one species of epiphyte is recorded, the **Tongue Orchid**, *Dendrobium lingueforme*. Of the terrestrials the following have been identified:—*Calochilus erecta*, *Microtis porrifolia*, *Prasophyllum elatum*. The **Native Iris** *Paterersonia glabella*, is also recorded.

Other smaller plants observed were:—*Viola hederacea*, *Eranthemum variabile*, *Dampiera stricta*, *Goodenia heterophylla*, *Scavola hispida*, *Hibbertia Billiardiera*, *Hibbertia diffusa*, *Romax umbellata*, *Stackhousia monogyne*, **Native Raspberry**, *Rubus parvifolius*, *Didiscus procumbens*, and **Flannel Flower**, *Actinotus helianthi*.

Just below the sandstone ledge—where a lower projection juts out and forms a splendid holding ground for the water which seeps down from above—is a delightful little fern grotto. Here is permanent water in the driest time, and the ferns are well protected from the heat by the overlapping rocky face. Here the great fern *Todea barbara*, so ruthlessly destroyed in many parts (although “protected”) is common; and with it the common **Umbrella Fern**, *Gleichenia circinata*, and the small **Maiden Hair Fern**, *Adiantum aethiopicum*. In this moist, sheltered part, too, are to be found the **Sundews**, *Drosera binata*, which bears long dichotomously branched leaves, and the small rosette form, *Drosera spatulata*. **Swamp Epacris**, *Epacris obtusata*, is also found in this section.

Quite a number of climbing plants are found here, though most of them find that the light which penetrates through the thin cover of foliage is sufficient to enable them to adopt a procumbent

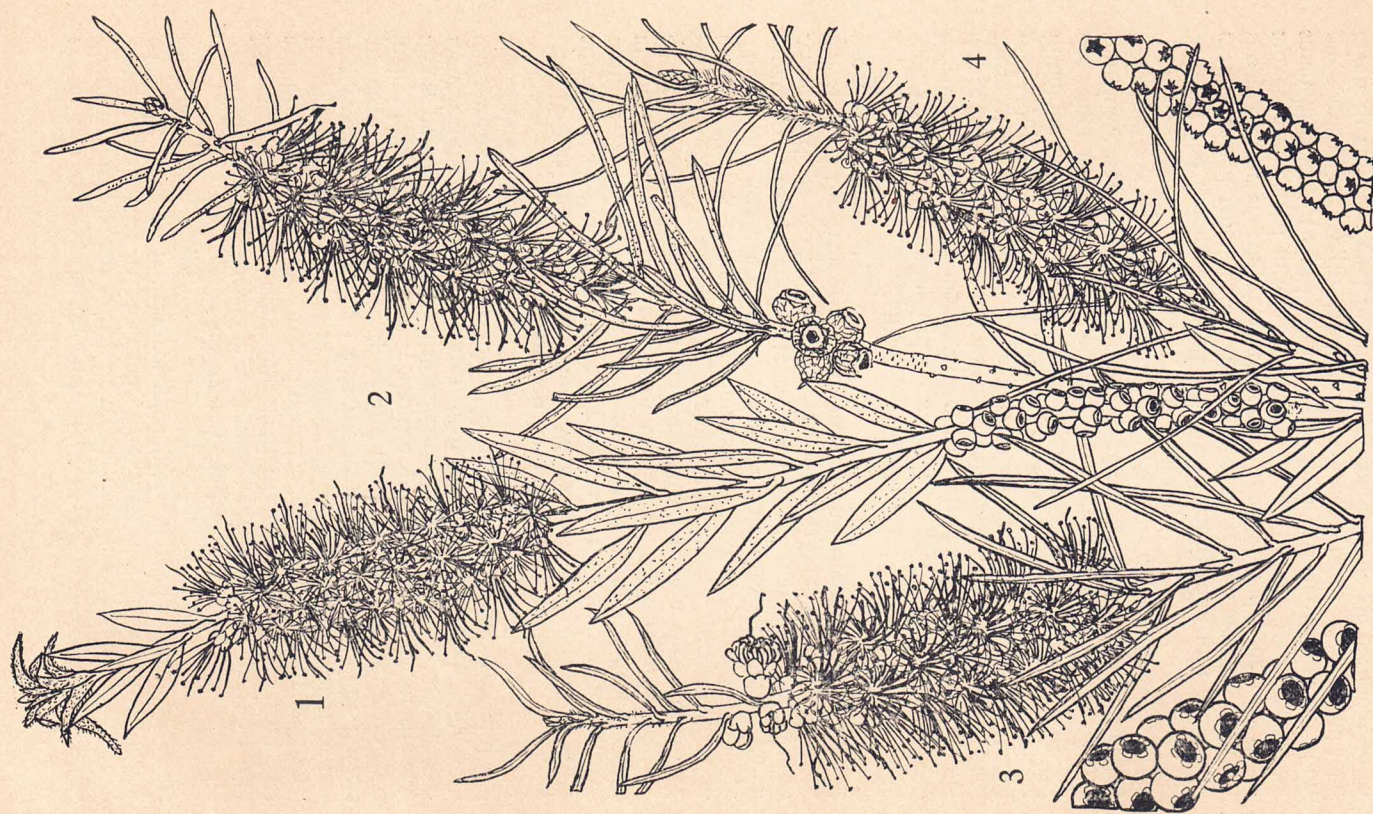
habit; and few will be found ascending the stems of trees and shrubs. Probably the loveliest of these creepers is *Clematis aristata*, which is delightful when it bears its masses of snow white flowers, but even more attractive when it loses these and becomes covered with its dainty, feathery, wind-carried fruits. It is sometimes called *Traveller's Joy*. Two species of *Kennedy* occur, one the rather common *Kennedy rubicunda*, with deep red pea flowers about an inch long, and the much less common *Kennedy prostrata*, a more delicate plant with smaller, rounded leaflets and smaller bright scarlet flowers. Both flower in the spring. Another creeper of this same family found here is the **False Sarsaparilla**, *Hardenbergia monophylla*, with deep purple flowers, borne in great profusion in spring, and with solitary coriaceous leaves, set at long distances from each other, along the slender stem. One other climbing member of the same family is recorded—a very dainty creeper with soft leaves and light blue flowers—*Glycine clandestina*. Two species of *Smilax*, the true **Sarsaparilla** are found, also *Smilax australis*, pure *Smilax glycyphylla*.

Still a few species of the mesophytic flora which must have covered great tracts of this land in earlier times remain on the better patches of soil.

The **Cabbage Tree Palm**, *Livistona australis*, one of these remnants, is represented by a few specimens at the foot of the slope. On the comparatively rich flat land extending for a considerable distance at the foot of the hill and outside our boundary there is a splendid stand of these interesting and majestic relics of a past age. Another plant occurring here which shows practically no modifications to combat the harsh conditions is *Wickstroemia viridis*.

For the bush nature lover who revels in nature in her most extravagant mood there are two seasons when a visit to this area will satisfy all their demands for colour and luxuriance. In the springtime they will be delighted with the great wealth of blossom of many of our gayest spring flowers, a great many more than I have listed here. But, predominant among them, both for number of plants and profusion of gorgeous bloom, is the Native Holly. Its great masses of golden yellow bloom almost completely conceal the holly-like, picturesque leaves which have given the plant its vernacular name. Great patches of this golden mass extend from the lower slopes halfway up the hill and make a wonderful show. In addition, at this time (August and September), there will be the *Boronia* on the sandstone at the top.

The second period for observing a grand display is November and December when the rocky ledges just below the plateau are alive with Flannel Flowers in full bloom. Although, of course, their colouring is not so gorgeous as that of the Holly they make a picture which most Australians would go far to view.



PROTECTED CALLISTEMONS OF NEW SOUTH WALES
1. *Callistemon lanceolatus*, 2. *C. rigidus*, 3. *C. linearifolius*, 4. *C. acuminatus*.
—Drawn by Jean Colditz.

are in two rings, crimson with small dark anthers. The crimson filaments are about an inch long, though in poor specimens they may be as short as half an inch. The calyx is scarcely to be discerned in the fruit (it is very conspicuously enlarged in some species); there are three carpels.

Callistemon rigidus.

This is a species which was once very abundant on the rocky ledges in the Sydney sandstone district but is fast disappearing. Its addition to the list of protected plants is therefore specially welcome. It is a shrub up to 15 feet in height. It has narrow lanceolate or linear leaves, acuminate, 2 to 5 inches long and crowded. The flowers are crowded into a dense spike and the spike is frequently up to 6 inches long. Sepals 5, fused, about a quarter the length of the stamens, petals 5, free, greenish, slightly longer than the sepals. Stamens bright red, in two rings, filaments about an inch long with dark anthers. The calyx lobes do not persist in the fruit and the rim is sunken.

Callistemon linearifolius.

This is another New South Wales species at one time fairly abundant on the sandstone but now quite rare, except in cultivation. It is very closely related to *C. rigidus* and differs from it mainly in the greater breadth of the leaves, their recurved nature and the more acute nature of the points. It is a shrub up to 15 feet in height. Leaves are narrow lanceolate, 2 to 4 inches in length, slightly recurved, acuminate to almost pungent pointed. The young leaves are covered with a soft down of white hairs. Apart from the young branches, the plant is glabrous. The flowers resemble those of *C. rigidus* but are not usually so densely crowded. The rim of the fruit is slightly sunken and the calyx lobes persist for a short time.

Callistemon acuminatus.

This also is confined to New South Wales. It has very narrow linear leaves, 2 to 5 inches in length and deeply channelled above. These leaves are distinctly and more abruptly pungent pointed than those of *C. linearifolia*. The flowers are crowded in the head and resemble those of the last named two species. They are a dark red in colour. The fruits are markedly contracted at the summit and the calyx lobes are enlarged and persistent. The fruit, the more acuminate nature of the leaf and its narrower width and channelled upper surface distinguish this species from *C. linearifolia*.

CULTIVATION.

All the species are well worthy of cultivation and are fairly readily raised from seed. Although the capsules do not open on the plant for several years they will open in a day or two if removed and placed in a warm dry place. The fine seeds should be sown broadcast (mixed with a little sand to make the distribution more even) in a light sandy soil in a seed bed. Care should be taken to sow the seed lightly as the percentage of germination is very high and the tiny seedlings will choke each other. Sowing

WILD LIFE PRESERVATION SOCIETY OF AUSTRALIA.

STATEMENT OF RECEIPTS AND DISBURSEMENTS FOR THE YEAR ENDED 30th JUNE, 1937.

1936:		1937:	
July 1	To Balances:—	£	s d
	Bank of New South Wales ..	£152	4 2
	Honorary Secretary ..	5	0 0
	Commonwealth Bonds:—		
	3½% 1947 ..	50	0 0
	4% 1941 ..	82	10 0
	4% 1938 ..	156	7 6
1937:	June 30: Legacy under Will ..	78	7 0
	Donations and Subscriptions ..	26	17 6
	Sale of Journals ..	7	3
	Interest on Bonds ..	8	19 4
	Sale of Bonds:—		
	3½% 1947 ..		
	4% 1938 ..		
	Profit on sale of Bonds:—		
	Sale Price ..	250	17 6
	Less Book Valuation ..	206	7 6
		44	10 0
		£605	2 9
June 30:	By Printing, Stationery, Postages and		
	other Secretarial Expenses ..	14	15 2
	The Angophora Reserve ..	364	19 7
	Postages on Journal and Expenses	8	5 6
	connected therewith ..	29	2 5
	Annual Report & Wild Life Journal	11	0
	Bank Charges and Exchange ..	1	1 0
	Science House ..	98	0 1
	Bank of New South Wales ..	5	0 0
	Cash Honorary Secretary ..	82	10 0
	Commonwealth Bonds:—		
	£100 4% 1941 ..		
	Subscriptions unbanked ..	18	0
		£605	2 9

SYDNEY, 2nd DECEMBER, 1937.

We certify that we have examined the above Statement of Receipts and Disbursements of the Wild Life Preservation Society for the year ended the 30th June, 1937, with the books and vouchers of the Society and have found them to agree therewith. We have seen the Certificate from the Bank of New South Wales for the Australian Consolidated Treasury Bonds, face value £100, as above and for the balance at Bank.

(Sgd.) K. A. MACKENZIE, F.C.A. (Aust.),
Honorary Auditor.

THE ANGOPHORA RESERVE
The Wild Life Preservation Society's Sanctuary at Avalon, N.S.W.



We urgently appeal to Tree Lovers and other Friends of Nature Protection in Australia, to subscribe, as far as they are able, to our special "Angophora Reserve Fund," to enable us to recoup our general funds for the great outlay on the purchase of this sanctuary area, and to assist in maintenance cost. £500 is urgently required.

Building Print, 20 Loftus St., Sydney.