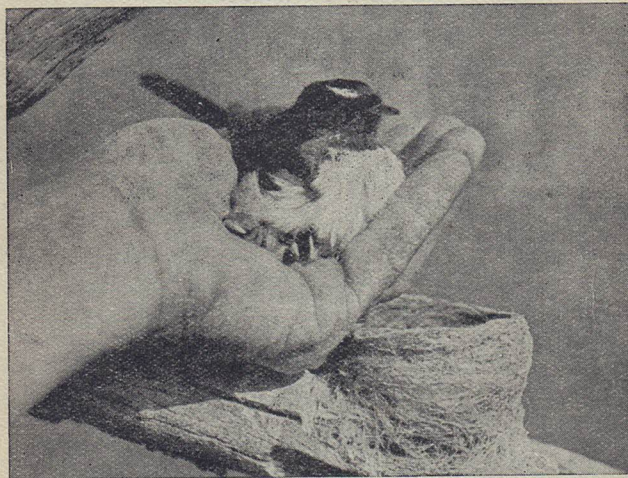


AUSTRALIAN WILD LIFE

JOURNAL OF THE
Wild Life Preservation Society of Australia



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

Wild Life Preservation Society of Australia

Twenty-Fifth Annual Report

*Presented to the Annual Meeting of the Society held at Sydney
30th July, 1935*

The following report covers the period from 1st June, 1934, to 30th June, 1935, but the accounts to be presented will cover the calendar year 1934 and the first half of the present year.

In view of the initiation of the publication of our official Journal "Australian Wild Life," this report, like the previous one, will be mainly in the nature of an outline only of the multifarious duties which have occupied our attention during the period under review.

The present report period has been marked by great activity on the part of the Society, even though, as usual, much of the work has been of a rather unobtrusive character—this relates to both the faunal and floral sections of our work. In addition to our specific and general work to be touched upon in the following pages, some intensive propaganda has been carried on throughout Australia. It is worthy of stressing here, as in some past reports, that this local and general propaganda work has always been one of the strongest sections of our work. We have, in short, always aimed at creating an atmosphere of understanding and love as regards our wild Australia; believing that this will in the end be of the greatest service in the permanent preservation of both fauna and flora. This does not imply that we are not wholeheartedly behind the administration of the Acts for fauna and flora protection and preservation wherever those apply in Australia. Quite on the contrary, our close connection with the genesis and the formulation of such, and our constant watchfulness and activity in many sections of the work, may be taken as a guarantee that while we are interesting and teaching the people, we are prepared to enforce, or to aid the enforcement of, the laws where we find the necessity.

As in previous years, a good deal of our work has been of a recurrent nature. This relates mostly to preservation of individual birds and other fauna, invasion of sanctuaries in various parts of the country, interference with wild flowers and other flora, etc. While this class of work is of great importance and would alone justify the existence of the Society, many matters of larger import have con-

stantly to be dealt with. Most of these are truly of national interest and would justify the fullest whole-time attention on the part of your executive officers, if such could be available, as well as the use of far greater funds than it has ever been our privilege to have at our disposal. It is well for our members and other supporters to know this. As it is we have been spending the absolute minimum on running expenses for some years past and have been trying to "save up" with a view to having funds to meet special purposes, like that of aiding in the setting aside of bush areas (such as the Blue Gum Forest in the Blue Mountains, the Pymble Forest) and other special causes to which we have contributed in the past. Several such, of urgent importance, loom up in the offing, but any action that we may take as an organisation must be severely limited by the state of our finances.

Koala Preservation.—While on this subject, and before concluding this preamble, we should mention that for many years we have had in mind the acquisition of a large area of suitable wild bushlands to be used as a special sanctuary for the Koala or Native Bear—a real sanctuary in every sense, where the animal might not only be safe from molestation, but away from all interferences with their natural habits of life. Interesting as it may be for the casual human visitor to see and handle Native Bears in large enclosures, these are, as we have before pointed out, more in the nature of zoos or menageries, and cannot in any way be looked upon as appropriate agencies for the re-establishment of this most unique and much-loved bush denizen. Such a re-establishment is, and has been from our inception, right in the forefront of our national programme. The scheme will cost several thousands of pounds, but we feel convinced, judging by past commendation of members and friends, that the Australian public would consider the expenditure more than justified. We commend the matter to the attention of our members, with the hope that means may be found to satisfy the national need.

I. GENERAL PRESERVATION

Magpies, Kookaburras, Seagulls.—With monotonous regularity it is our unpleasant duty to record that much of our time is taken up in dealing with complaints regarding the caging, or holding captive in backyards and gardens, of protected birds. Particularly does this relate to Magpies, Kookaburras and Seagulls, concerning which we have had more complaints during the past period than ever before. So serious has this become that we have thought it advisable to offer our assistance as a Society to the Chief Secretary's Department, in conducting a house to house canvass in certain districts, with a view to abating the trouble by personal instruction—and warning where necessary—to householders who keep such birds in captivity in contravention of the law. In the meantime we asked the Chief Secretary to again warn the public through the daily Press, and this has been done. In response to our suggestions also, we have been advised that when the Police are about to make enquiries during October next con-

cerning the registration of dogs, arrangements will be made to ensure that they will take the opportunity, when visiting residences, to note whether any protected birds or animals are being kept. At the same time the Department has expressed its appreciation of the activities of this Society.

One of the most regrettable features of this bird imprisonment is the readiness with which people will accept the most specious reasons for retaining possession of the birds, even after the law has been pointed out to them and their humanity has been appealed to. They say that the bird is "quite happy" with them (the bird has no voice in this, of course) and that anyway if they let it go it will probably be killed by its wild mates; and so on. In reply to the last we should point out that there is no reliable account on record of any such bird, *which had the full use of its wings*, being seriously interfered with by its fellows, let alone killed! There are, however, very many observations of the wild birds persecuting one of their own kind which was held prisoner in a yard or garden with its wing or wings cut—and perhaps this lends a little colour to the popular excuse; though, after all, it is founded, no doubt, upon the selfish desire of so many people to amuse themselves, at whatever cost to our wild life. As regards the Silver Gulls; their numbers are not likely to be seriously depleted by this imprisonment, but this is no excuse, of course. As one of our members has written: "The person who can keep a sea bird in his back yard away from the sea and deprive it of the joy of flight, must certainly have a callous nature, and needs correcting."

Caging of Birds at Exhibitions.—Allied to the matter that we have just mentioned is that of the caging of fauna for public display at exhibitions in the cities. Council has asked the Chief Secretary to disallow all such, as, apart from the inherent cruelty, they are a direct incentive to the public to make their own backyard, and garden, collections. We trust that the public will see, with us, the danger of thus encouraging directly or indirectly, destruction of and interference with our wild life.

Caging of Birds at "Paddy's Market." Sydney.—The general question of the caging of birds, other than those on the protected list, is dealt with at a later stage; but we should mention here that some preliminary action has been taken through a committee of the Council, in conjunction with the R.S.P.C.A. in Sydney, aimed at dealing with the scandalous treatment of cage birds so often observed and reported to the Society. While the matter is one of cruelty rather than one coming directly within the purview of the Birds and Animals Protection Act, it has a very direct connection with the whole question of wild bird preservation. It has concerned this Society for many years past, and we hope that we shall be able to bring about some satisfactory solution in the near future.

Pet Koalas.—We have had evidence for several years past that a slow movement towards a natural re-establishment of the Native Bear was taking place in some of the eastern parts of New South Wales.

Though we hope that this movement will gain momentum as time goes on, it is clear that we must give it the fullest help in its early stages. Unfortunately our efforts are somewhat foiled by the desire of so many of our people to keep our rare animals and birds as pets, at whatever cost to the wild life itself. During the year some newspaper publicity was given to the seizure by the police of a Koala in captivity at Grafton. Advantage was taken of this by the Honorary Secretary to point out through the Press the great and pressing necessity for complete co-operation by the members of the general public in bringing the Koala back to its native haunts and the great danger to the species arising from this desire to capture and hold the animal.

Bower Bird Destruction.—An unusual item for our annual report is that of deliberate destruction of Bower Birds (Satin Birds) in the Tenterfield District, reported by a member resident therein. Unfortunately we were unable to obtain sufficient evidence to enable a prosecution to be undertaken.

Dealers' Advertisements.—For many years past one of our greatest bugbears has been the unprincipled dealer who clandestinely—and sometimes openly—traffics in protected birds. One particularly flagrant case dealt with recently was that in which a dealer advertised in a weekly journal for rare birds, at the same time naming several of those on the protected list. Steps were taken through the proper authorities to prevent the insertion of the offending advertisement and to deal with the advertiser himself. It is clear, however, that our main business lies with the general public. If they will refuse to have any connection with such agents of destruction—for that they are—then the nefarious traffic must automatically cease.

Scrub Turkeys at Barrington Tops.—Members of Council were greatly concerned recently when it was brought under notice that a publication, issued by the Tourist Bureau (though privately printed) to advertise the attractions of Barrington Tops, specifically mentioned that towards the end of the year Scrub Turkeys were plentiful and were "delicious table birds." From the tone of the paragraph it was clear that the tourist was being advised to bring his gun with him to shoot these rare protected birds. The matter was immediately brought under the notice of the Chief Secretary, who gave instructions for the offending publication to be withdrawn and issued in an amended form. Special instructions were also issued to the police with a view to preventing breaches of the Birds and Animals Protection Act in this beautiful bushland area.

Open Seasons for Kangaroos and Wallabies.—Though we gratefully acknowledge that it has become increasingly difficult for all and sundry to obtain open seasons for these marsupials, there is still dissatisfaction with the methods employed prior to the announcement of such open seasons. It is felt that the fullest public enquiry should be made in each district and that both local citizens and those specifically interested in the maintenance of our wild life should have an opportunity to give their views or to record their objections, before



WILLIE-WAGTAIL (*Rhipidura motacilloides*)

Adult bird brooding young on photographer's hand. Many of our people are now finding it quite easy to tame the wild birds—with great joy to themselves. A bird beloved by everybody—but the house cat, whose fur the bird cheekily plucks out—surely poetic justice!



RED-TIPPED PARDALOTE or "DIAMOND BIRD"

(*Pardalotus striatus*)

The bird is en route to its nestlings, with the beak fully loaded with insects. It is one of the daintiest of our bush birds, and relies upon the preservation of native trees for its food supply. Its nest is very often found in a hole in a fencing post.

—Photo: Otho Webb.

final action is taken. A case in point was the declaration of an open season for Kangaroos and Wallabies in the Yass Pastures Protection District. The Chief Secretary, in response to our enquiries, stated that an open season for three months had been declared, following upon complaints as to their increase and on the recommendation of the local Stock Inspector.

Kangaroos in Berridale District.—Our very active local member, Mr. Amos Williams, reported during the year that Kangaroos had made very satisfactory progress in the Berridale District. Mr. Williams makes a periodical examination of this and associated districts—including the Kosciusko Tableland—and reports to the Society.

Deer in National Park.—On a number of occasions during the period under review—and frequently during the past ten years—the occurrence of the Deer in the National Park near Sydney, has been debated. There has been a strong feeling among many wild life conservationists that a very serious mistake was made at the outset in introducing any exotic animal like this into an area which was intended for the permanent preservation of Australian fauna and flora peculiar to the locality. Latterly this feeling has grown considerably, in view of the grave destruction of native undergrowth by the Deer and the coincident disappearance of our own native ground fauna from the park. During the year correspondence has been carried on with the National Park Trust on the matter and the Society has made the definite suggestion that the Deer should be removed, as far as possible, from the confines of the park. At the same time we have informed the Trust that this Society will be very glad to co-operate in any practical measures for the re-establishment of the rightful faunal occupants of the Park.

Leg-banding of Lyre Birds.—Recent correspondence in the Sydney daily Press led to some misunderstanding as to the Society's attitude. It had been proposed by certain ornithologists connected with the Royal Zoological Society to initiate a plan for the fixing of leg-bands to young Lyre Birds in their nests in National Park, Middle Harbour (Port Jackson) and elsewhere, with a view to studying their movements after they left the nests. This, of course, would not merely necessitate interference with the nestlings on the first occasion of marking, but would natural lead to further visits to these and other nests from time to time in an endeavour to trace the banded birds.

Immediately this became known this Society lodged a strong protest with the Chief Secretary, asking him to resist all such interferences with these relatively rare and protected birds in such sanctuaries, pointing out at the same time that there were already many disturbing agencies for these and other fauna. A note was also sent to the Press defining the Society's position. It was pointed out that the Wild Life Preservation Society had no objection to the leg-banding of non-rare birds—particularly those of a migratory nature—for bona fide purposes of ornithological observation, but that the Society had always sternly set its face against any undue interference with our more rare fauna, wherever situated, and peculiarly against any in-

vasion of sanctuaries which might result in disturbance of our birds or animals of any kind, whether for leg-banding or any other purpose. We feel that we voice the feeling of our members generally when we say that we shall always resolutely fight such trespassing, whether it is done in the name of science or otherwise; for one of our strongest principles is at stake. It is gratifying to know that we have been assured by the head of the Chief Secretary's Department that the policy of the Department is definitely "hands off the sanctuaries!"

£2766 in Fines.—At our September, 1934, Council Meeting, it was reported that one Sydney firm had been fined £2766 for holding skins of protected animals. The many large fines of recent years should act as a deterrent to those whose natural interest in their native land is not sufficient to prevent them from hastening its destruction.

Grasshopper Poison and Bird Life.—During the spring and early summer of 1934 Queensland and New South Wales were subjected to a very heavy infestation by plague grasshoppers. Owing to reports submitted Council became very anxious as to the possibility of the poisoning operations being conducted at the behest of the New South Wales Department of Agriculture, resulting in grave destruction of our wild bird life. The matter was immediately taken up with the Department, with a view to the removal of danger. At the same time the Society expressed its full appreciation of the gravity of the grasshopper attack to the landholder. The Under Secretary to the Department indicated to us that the weight of evidence was against there being danger to our bird life, citing the experience of Canada, South Africa and the United States of America. He promised, however, to have the greatest care taken and also to see that a close investigation was made during the course of the poisoning operations. The results seemed to support the Department's contention and so far we have had no reports of bird destruction by grasshopper baits.

Preservation of Woody Pear (Xylomelum).—Since 1933 this Society has been endeavouring to have the Woody Pear, *Xylomelum pyriforme* added to the list of plants protected under the Wild Flowers and Native Plants Protection Act. This quaint and interesting plant with its woody pear-shaped fruit, is one of the most distinctive plants of the Sydney bushlands. In recent years there has been a very grave diminution of the numbers of the plant because of systematic destruction by dealers and other collectors bringing the foliage in for fruit and butchers' shop decorations. The leaves are handsome, and "keep" very well. In many cases a whole tree will be cut down to strip its rather sparse foliage. Apart from this destruction, of course, the tree is one of our quaintest, and is well worthy of our permanent protection. It is therefore very gratifying to know that in the recently issued amended list of protected plants, the Woody Pear is included. This is also known commonly as Wooden Pear and Native Pear.

Fig Tree in Hyde Park.—Without unduly magnifying its importance, we desire to make a reference here to the saving of a beau-

tiful Fig Tree situated in the main north-south walk of Hyde Park, Sydney, not far from the War Memorial. Quite a stir was created over the proposal to remove this tree because it stood right in the avenue itself (in the remodelling scheme). This Society fought hard for its retention, first because of the natural beauty of the tree itself and secondly because of the important principle involved—so often lost sight of by Municipal bodies—that no tree should be idly removed, just because it stands in the way of a bald sight of our own creations in stone or bricks and mortar. It was particularly pleasing that some very strong support for the retention of this tree came from prominent officials of the Society of Artists, and from many other citizens interested in architecture and town planning. We hope that the tree is now safe from interference.

New Wishing Tree.—In addition to residents of Sydney itself, most Australian visitors to the mother city, are familiar with the great old Norfolk Island Pine (*Araucaria excelsa*) in the Botanic Gardens, which for many years past has had a strong romantic halo round it, because of its history as a trysting place and "wishing" tree. In recent times, many people have been sorry to note signs of old age in this grand old tree; its appearance denoting that it has not many more years to live. Members will have noted with pleasure the public movement to plant a new wishing tree which culminated, three days ago, in the formal planting, by the Governor's lady (Lady Hore-Ruthven) of a young tree of the same species as the historic one. This is not intended to supplant the old tree, of course, but is to carry on the traditions of its elder, when the latter has gone.

In this connection it is pleasing to be able to record that this movement was initiated by one of our own Councillors, Miss Thistle Y. Harris, B.Sc., an ardent tree lover, in September of 1934, through the columns of the "Sydney Morning Herald."

For general information it may be mentioned that the Wishing Tree first grew in the original Botanic Garden situated between the present Macquarie Place and Phillip Street, Sydney. From here it was transplanted to the site which it now occupies in 1817. The area was known by the aboriginal name of Wockannagully, but was renamed by Governor Phillip, Farm Cove.

Roadside Beautification and After Care.—Notwithstanding many grave interferences with native trees bordering highways and other roads—largely by the postal authorities—we are glad to be able to record that increased plantings of roadside trees have taken place during the period under review by several authorities. The Department of Main Roads in New South Wales has been increasingly attentive in this direction. May we suggest that the Department will concentrate still more, wherever possible, upon the saving of existing flora—in the shape of natural lines of trees and shrubs, copses or groups and isolated clusters of native trees—when re-forming or altering roads, or in laying down new roads. Often, as we have seen, a very slight diversion of a road might mean the saving of splendid trees, of great

value scenically and as a shade and resting place for the traveller. Such trees cannot be replaced in a man's lifetime.

Whatever is done in the way of planting of trees, it is recognised that after care is of prime consideration. In conveying our thanks to the Department of Main Roads, in September last, for the good work that they were doing, we took occasion to enquire as to what steps the Department took regarding this after care. In reply we were told "the care of trees planted on Main Roads by the Department, or by Councils with the Department's co-operation, will be dealt with systematically as part of the ordinary operation of maintaining the roads." A copy of a circular issued by the Department, and bearing on the same matter, was forwarded to us. In this the wishes of the Department are clearly stated to Councils and advice is given regarding after care. This is a very solid move in the right direction; for, in the past, thousands of trees—many of which were planted out with great ceremony—have very shortly died for want of proper attention.

Destruction of Planted Trees for Transmission Wires.—One of the most stupid and inexplicable examples of tree destruction is that in which well-grown ornamental roadside trees, often planted and tended at great expense by some public body, are heavily lopped, "topped," hacked about or cut back to a few feet from the ground, just to make way for an electric wire or two. There is no reasonable excuse for this form of vandalism. Where it is not practicable to take the wires by another course, with a view to non-interference with the trees, the necessary sheathed wires, well fitted to stand abrasion, may be obtained at no great additional cost for those sections in which the wire must pass through the trees. This is an established custom in many other parts of the world and should be followed by us.

N.S.W. Rural Bank and Tree Removal from Building Lands.—One of the most active causes of tree destruction within the precincts of our cities and towns is the habit of thoughtlessly clearing allotments without regard to the type of building to be erected, or the area to be covered by such. Many of our most beautiful suburban areas of our capital cities have been ruined scenically and in their provision for shade and tree beauty, by this thoughtless action. Tree groups, of kinds so well adapted by Nature to the particular location, and probably often of hundreds of years of age, are swept away in a day or two, only to be followed a little later on, in many cases, by attempts at some sort of tree restoration—quite commonly with the most unsuitable species. In this process the natural homes of thousands of our most useful and interesting native birds are needlessly swept away.

During the year just past one of our Councillors, Mr. Walter B. Griffin, a most distinguished town planner and architect,—and who himself has done so much toward preservation of trees and natural scenic beauty—brought under the notice of Council that a clause in the "Minimum Standard for Building Loans" issued by the New South Wales Rural Bank Commissioners, stated that all stumps and

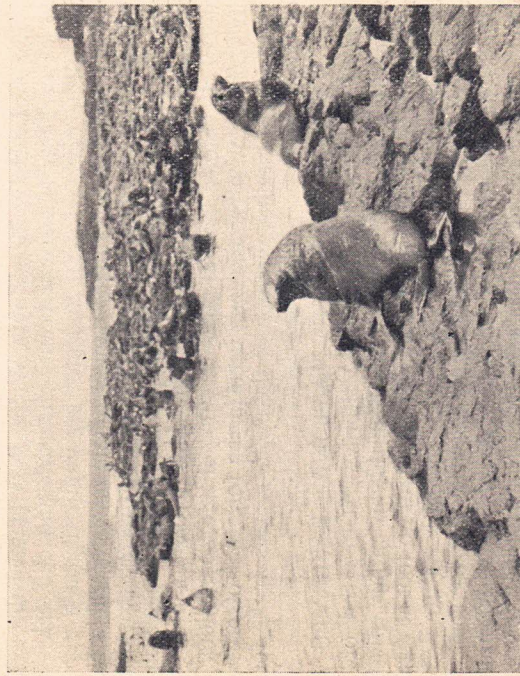
roots of trees were to be removed from actual building sites and at least 20 feet clear of all building lines. It was seen by Council that this would lead to much destruction of trees that otherwise might not take place. The President of the Rural Bank Commissioners was communicated with and the matter was discussed. It was pointed out by us that we realised to the full the great care that must be taken by the State in protecting its investment, but that if a certain amount of elasticity were given to the rule, so that the Bank's inspectors could deal with each site individually, the Bank's needs could be satisfactorily met, while much necessary tree conservation would result.

We are very pleased to record that as a result of the very friendly co-operation of the Bank's president, Mr. Commissioner McKerihan, it was agreed that "where trees are found adjacent to the building alignment, their removal will not be asked for unless there is every indication that the roots will interfere with the foundations of the building."

In this connection we should mention that one of the most popular misconceptions regarding certain of our trees is that they will inevitably send their roots along the surface and so uproot buildings. But some of the most common surface rooters only follow this habit because of some peculiarity in the soil. Even Moreton Bay Fig Trees, Port Jackson Fig (Rusty Fig of Queensland), Coral or Erythrina, Sydney Red Gum (*Angophora*), Bloodwood and Swamp Mahogany will neither interfere with buildings nor with concrete paths or roads where the soil is deep or well drained. Where rocks are close to the surface, or in low-lying lands where the soil is sour or "gassy," of course the roots of these and many other trees will keep to the surface. We trust that the Australian Press will help us to broadcast this information.

Bonfires Cause Vandalism.—At the Society's Council Meeting in May of the present year, several complaints were received, from various districts, that there had been great vandalism in connection with patriotic bonfire demonstrations. In one case, where the great fire had been set off a day in advance of the time arranged for, certain residents had gone to work and had, in a short space of time cut up a large quantity of young growing bush trees and one quite large tree in a district which could ill afford the loss of one tree. Members of Council expressed the hope, which we most strongly support, that our Australian people might approach all occasions for public demonstration in an entirely different manner—instead of making such an excuse for destruction, to train themselves and their children to the idea of using every public or State occasion for the planting out of suitable native trees; something that will leave a permanent mark of tree beauty and shade, rather than a train of destruction and smoke.

Possum Protection in Queensland.—Those members and friends who have followed our annual records will be familiar with the vast destruction of the Common Possum which has taken place in various States—notably in Queensland. During the year past reports have



AUSTRALIAN SEA-BEARS (*Arctocephalus doriferus*)
There is a fine colony of this interesting Fur Seal at Phillip Island (Seal Rocks), Victoria, and another at Lady Julia Percy Island.
—PHOTO: MR. LEWIS.

come to hand from time to time of illicit destruction in each of the eastern States, and a number of prosecutions have taken place. During March of this year, the Minister for Agriculture and Stock in Queensland made the welcome announcement that there would be no open season for Possums in Queensland this year. The reasons given, however, were not altogether happy: "Oversea advices indicated that the market for furred skins was very uncertain, and there was an urgent need for the conservation of Possums throughout the State." Notwithstanding the more important reason given for this protection, it would appear that had the market been in a better state the Possums would have had to suffer, as of old, regardless of any necessity for protection!

Opening of Duck Season, N.S.W.—We have often experienced very great dissatisfaction with the incidence of the duck-shooting seasons in various parts of our inland country. There is not only local variation in the occurrence of the Ducks, but a very varied seasonal fluctuation. Owing to reliable information received by us from the Balranald District, at the end of January of the present year that very great harm would come to "flappers" and even nestlings, if the Duck season were to open at the scheduled time of February 15, we approached the Chief Secretary of New South Wales, with a view to getting a postponement of the season's opening. We were able to have the opening date held over for one month, thereby saving the lives of many wild ducks of various species.

Barrenjoey Peninsula Preservation.—The Barrenjoey Peninsula, to the north of Manly, New South Wales, is far famed throughout Australia for its great natural beauty in beach and cliff, lakes and wooded hills. With its great and growing popularity as a popular resort, this area is in imminent danger of almost irreparable harm. It is therefore of interest and importance for us to record that during the present report period a body styled the Barrenjoey Peninsula Advancement League was formed, largely with the aim of preserving as many of the beauty spots as possible. One of our Councillors, Mr. Arthur J. Small, who has for long been in the forefront of preservation work in this locality, was one of the prime movers in the formation of this body.

II. SANCTUARIES AND NATIONAL RESERVES

Nature Reserve Near Ararat, Victoria.—At the end of December last, one of our members, Miss Banfield, an enthusiastic field naturalist, brought to our official notice a movement on foot at Ararat, Victoria (where she resides) for the setting aside of a Nature Reserve in the vicinity of the town. Miss Banfield stated that for some time past efforts had been made through the Ararat Field Naturalists' Club to secure a piece of land as a sanctuary, particularly for native flowers. The district borders on the Grampians and much of the native flora is unique. Hundreds of acres of the best wildflower country in that district have been permanently lost through being thrown open for settlement and tobacco culture, and the reserve aimed at had become urgently necessary.

We immediately got into touch with the Premier of Victoria, setting out the facts and pointing out that suitable action could be taken at very small cost to provide for a very beautiful and attractive sanctuary and Nature garden within the timber reserve near Bridal Hill—a scheme which appears to have been originally sponsored by the Ararat Rotary Club. In due course the Premier put us into touch with the Forests Commission of Victoria which had the matter in hand. In correspondence with us, the Commission has stated that the position was to be discussed on the spot with the local representatives of interested bodies. We are still in correspondence with the Commission on the matter and hope to be able to report to members a satisfactory conclusion.

Reserve Strip at Bulli Pass.—During 1934 the Bulli Shire Council sought the assistance of this and other organisations with a view to having a strip of land at the foot of Bulli Pass and Sublime Point set aside as a National Reserve. Briefly, the Government was asked to resume approximately 423 acres of the sloping mountain side, in order to preserve as far as possible the naturally beautiful setting of these popular resorts, and to prevent the wanton destruction of the native trees and other plants, which was going on. This movement was one of the best examples of concerted work by many organisations, and it was very satisfactory to receive a notification in March of the present year that the Premier had approved of the necessary funds being made available to enable the land to be acquired by the Government.

Deewhy Lagoon Proposed Reserve.—Action taken by this organisation in conjunction with the Parks and Playgrounds Movement, the Australian Forest League, the Town Planning Association, the Warringah Shire and other bodies, with a view to the permanent reservation of low-lying lands adjacent to the famous Black Swan lake of Deewhy, near Manly, N.S.W., is still in progress. We hope that next year we shall be able to report a satisfactory conclusion.

Blue Mountains National Park.—A very ambitious project has been under way for some time past, aiming at the reservation of certain large areas in the Blue Mountains. We hope to deal with this in some detail in a later report, but in the meantime should inform our members and the general public, as well as the Blue Mountains National Park Committee and the New South Wales Federation of Bush Walking Clubs, that we have strongly espoused this cause, which we will support in every way practicable at the appropriate time.

Garruwarra Primitive Park and Resumption of Lease Residues.—This beautiful coastal reserve was expressly set aside to be retained as a primitive area—for walkers only, although road traffic can approach to within easy distance at several points. Several attempts have already been made to infringe this definite understanding. We trust that both Government and Local Governing Bodies interested will respect this and that the park will forever remain as near as possible to its original primitive state.

A great drawback to this Garawarra Reserve is that there are two small areas privately leased, within its precincts. They are in key positions also as regards natural water supply to the Reserve and to part of the National Park itself. At the present time applications are being considered by the local Land Board, for the conversion of these leases into freehold. The Parks and Playgrounds Movement, the Federation of Bush Walkers and other bodies have taken this matter up very strongly and are determined to fight strongly for the resumption of all such lands. The position is clear—we do not intend or want the lessees to suffer hardship; and for that reason we consider that it would be a reasonable thing for Government to compensate the small lessees affected for any loss that they might suffer, otherwise to give them a suitable exchange of property. But this is clearly one of those cases in which public needs transcend the claims of the individual.

In other countries too—particularly in the United States—Governmental and private authorities are strongly co-operating for the resumption of all private lands situated within the parks or the great national reserves. During a recent year the Federal authorities alone in the United States spent more than one million pounds for this purpose alone, while private citizens donated similar lands to the extent of millions of dollars.

Oil Tanks at Chowder Bay Military Reserve.—Since the beginning of our history, one of the most noble scenic views has been that of Middle Head, Port Jackson, and the wooded foreshores reaching away to the south as far as Bradley's Head. Every Australian, from whatever State he hails, has felt the glory and the grandeur of this section of the most beautiful harbour, on entering Sydney Heads from the ocean. From time to time there has been a whittling away of foreshore areas and of the trees crowning the heights and some of the slopes. It has remained for the present year, however, to mark the most serious spoliation—desecration is not too great a word—ever attempted, and this under the hand of the Commonwealth Government itself.

During May, it became known that the Defence Department proposed to erect two great oil reservoirs on the narrow slopes of the northern end of Chowder Bay. The tanks are to be no less than 116 feet in diameter, exclusive of moats and embankments. A most shocking and inexcusable destruction of the beautiful Angophora-Bloodwood-Banksia flora has already taken place, and a great scar has been made in the side of what was one of Sydney's most beautiful spots.

As soon as it became known that this official vandalism was intended, this organisation got into telegraphic touch with the Commonwealth authorities at Canberra, and also with the Premier of New South Wales, who was at the time in Canberra, with a view to halting the proposed work. Parks and Playgrounds Movement, the Town Planning Association as well as other bodies and many private citizens, also approached the authorities, but so far without avail. It

is inconceivable that out of the immense length of foreshores of Port Jackson, some suitable place could not have been obtained for these tanks. A great concern in which the Commonwealth already holds at least fifty per cent. of the control, has established a vast tankage in another part of the Harbour. Why could space not be found in that spot, or some other place already defiled by these hideous constructions. It is to be feared that the first and final consideration was merely that here the land was "cheap" and would cost nothing. From a town planning point of view, as well as from that of wild life preservation, the decision to place these constructions here, was unjustifiable and without a precedent even in Sydney Harbour, where so much vandalism has occurred along the shoreline. We trust that even at this late hour the Government will withdraw and do its utmost to restore the area, even though a practical restoration of the beautiful natural plant assemblage is already impossible, so great has been the destruction.

Mosman Golf Club's Lease at Middle Head.—Allied to the former matter, because of its near proximity, is the question of a lease of the northern part of this Middle Head reserve by the Mosman Golf Club. Here a section of these beautiful shores was, some time since, leased to this Club, to the practical exclusion of hundreds of thousands of Sydney and other Australian citizens, whose birthright this surely is. Recently the Club applied for an extension of the lease, but, owing to the great public outcry, it is understood that the application was withdrawn. There can be no question that this lease should be immediately cancelled, in the interests of the people as a whole and because of the destruction of native flora which has gone on for many years past there. Large numbers of Angophoras, Eucalypts, Banksias, Paper Barks and many other natives have disappeared from this area. Your Council pointed out to the Minister for Defence on several occasions the destruction of native trees that was going on in this and nearby areas during the last few years, and even though the Minister issued instructions forbidding such, it has still gone on. In saying this we do not necessarily imply that such destruction has been deliberate or at the desire of the club itself. It would be a very magnanimous thing for the club to itself agree to a termination of its occupancy of this public land.

Gigantic Sydney Red Gum at Avalon.—For some time past we have been aware of the existence of a gigantic specimen of the Sydney Red Gum on a block of forest land at Avalon, several miles north of Manly. This tree—also known as Gum Tip Gum, Smoothbark Apple, etc.—is perhaps the most typical and one of the most beautiful of the Sydney sandstone country. Usually, even when old, it is not of large size, when compared with the great forest giants among our timber trees. This particular specimen is very large and, as far as we know is the largest in the Sydney area. In addition it happens to be located on a very beautiful bush area, where the floras of the sandstone and the Narrabeen shales commingle. It is hoped that a way will be found of acquiring this area so that the tree may be held

as a public monument for as long as its life lasts—perhaps many scores, or even hundreds of years to come!

III. GENERAL

Kangaroo Hunts.—At no time in our twenty-five years history have we opposed the thinning out of sections of our marsupial or other fauna by humane means, where it has been demonstrated that these were of a nature, or in numbers sufficient to constitute a grave menace to primary development. We have known many instances of course, where such an argument was used by those who were primarily out either for a "Roman holiday" or to gather saleable skins, and these we have consistently fought.

The Kangaroo Hunt, organised primarily for sport—whatever specious excuses may have been invented frequently to justify it—has always been opposed strongly by us, as also the distribution of films depicting such. On several occasions we have had strong public support for our attitude, and we have no doubt as to the present stand of the people in this regard. When arrangements were being made last year for the visit of the Duke of Gloucester, a suggestion was made by someone through the Press that a Kangaroo Drive should be organised for the Duke's entertainment. We immediately entered a strong protest to the Chief Secretary of New South Wales, the State Director of the Royal Visit and the Federal Minister in charge of the visit. In reply we were definitely informed that no such function would be countenanced in the official programme. The rumour that such a hunt was to be held was also emphatically denied through the Press. Yet, notwithstanding this, during the visit of the Duke to Edinglassie Station, a Kangaroo Hunt was held and was duly reported in the Press.

Following upon this it is hardly surprising that another hunt was organised by citizens out of Wagga at the beginning of June of this year. A leading Australian daily paper, the "Sydney Morning Herald" reported the occurrence with some apparent gusto; described how Mrs. So-and-So "expertly handled a car at 50 miles an hour while the shooters pounded the flying Kangaroos." The paper also showed photographs of the scene, without uttering any condemnation; but instead, explained how laboriously their own photographer had worked to ensure that he would get a good series of pictures.

Apart altogether from the cruelty of the incidents themselves and their effect in hardening some of our male population who are already too careless about our fauna, how can it be expected that we can have very satisfactory results with the several school children's organisations which are working to inculcate a love of our wild things and an interest in humane understanding and care of our bushlands, when such barbarism is not only tolerated, but is, in effect, supported by the oldest newspaper of the Commonwealth. We are taking the matter up, further with the authorities, with a view to preventing any recurrence.

Amendments to Birds and Animals Protection Act.—The Chief Secretary of New South Wales has announced that an Amending Bill

will be brought down in the near future. We have been asked to supply suggestions therefor and will keep in touch with the authorities.

Proposed Legislation to Prohibit Caging of Certain Birds.—Council of the Wild Life Preservation Society is in consultation with the R.S.P.C.A. with a view to a united proposal being put forward that legislation may be passed prohibiting the caging of birds (other



COLLARED BUTCHER-BIRD (*Cracticus destructor*)

This beautiful study by Otho Webb fully illustrates the rewards that come to those who are willing to "shoot the birds with a camera."

than protected birds which are already covered), with the exception of certain aviary-bred birds to be handled under licence only. This is prompted by the long-continued difficulty in dealing with the mass caging of birds by dealers and others and the cruelty practised by many householders in the confinement of wild birds. The Bill to be proposed will be somewhat on the lines of the so-called Buckmaster Bill, brought into the British Parliament by Lord Buckmaster and passed in November, 1933.

IV. OURSELVES

First Corporate Life Member.—During the present report period we have made one of our most important membership moves, in that we have enrolled our first Corporate Life Member. For several years past we have had great co-operation from St. George Girls' High School (presided over by Miss L. Geert) and particularly from the Tree Lovers' League at that school. This school has distinguished itself in many ways in preservation work and in directly fostering and actually undertaking tree planting work. We were therefore extremely glad when it was suggested that the school might come into close membership with us. Our illuminated certificate has been issued to the school and has been erected by the Principal in a prominent position.

During the coming year we hope to bring several other secondary schools into this form of membership, and that ultimately it may prove to be one of our most potent avenues for propaganda and work.

In our last Report and Journal, was an account of the St. George Girls' High School Tree Lovers' League and of some of its work. During the period under review the work of this virile young organisation has spread far beyond the boundaries of the school itself and trees, propagated, and nurtured by the school staff and children, have been distributed and planted out in many places. At the November meeting of our Council two girl officials of this League attended and addressed us on their work.

Members.—Our membership is spread far and wide in Australia, with also several in other countries (Great Britain, United States of America, Belgium). During the year we added an enthusiastic member and wild flower lover on the shore of the Great Australian Bight. A number of *Life Members* have also been added, including several women. In this connection we would draw attention to the low rate for *Life Membership* for women—£2/12/6. A considerable number of our men and women *Life Members* are station and other land holders in various parts of the country and are very helpful to us in the spread of interest. Among our *Ordinary Members*, quite a large number are well behind with subscriptions. A Special Appeal for subscriptions will be sent out shortly; in the meantime we will be very glad to have members send their subscriptions in for whatever amount they can afford.

Council.—At the 24th Annual Meeting held on 21st June, 1934, the following were elected as the Officers and Council for 1934-35:

President, Mr. Roy F. Bennett; Vice-presidents, Mr. David G. Stead, Mrs. E. W. Wrigley, Mr. A. H. Chisholm, Mr. W. G. Kett. Council, Miss M. M. Bennett, Mrs. P. K. Buchanan, Mrs. A. C. Caldwell, Miss M. E. Edge, Miss Ella McFadyen, Miss T. Y. Harris, Mrs. M. Howell, Mrs. C. M. O. Kelly, (Miss May Gibbs), Mr. E. J. Bryce, Mr. W. B. Griffin, Dr. W. H. Read, Mr. A. P. Rigby, Mr. W. J. Roots, Mr. A. J. Small, Mr. J. V. Turner, Mr. J. C. Wiburd, Mr. E. R. Wolstenholme.

Representatives of Associated Tree Lovers' Civic League: Mrs. E. W. Wrigley and Miss M. F. Crommelin. Hon. Treasurer, K. A. MacKenzie, Public Accountant, 273 George Street, Sydney. Hon. Secretary and Editor of Journal, David G. Stead. Hon. Auditors, Harrie T. Woods and Woods, Public Accountants, Challis House, Sydney.

During the year Mrs. Buchanan, Mrs. Caldwell, and Mrs. Howell found it necessary to resign through ill health. While greatly regretting the necessity, we wish to tender our best thanks to these Councillors for their faithful work in the cause, and for their help in many ways.

Mr. W. J. Cleary, President of the Australian Broadcasting Commission, well known as a bushlover and friend of wild life, has accepted a seat on the Council.

During the year Miss Ida Black, who had been an officer of the St. George Girls' High School Tree Lovers League, was appointed to the Council of this Society as Minutes Secretary.

Here we desire to record our special thanks to the Honorary Auditors.

Honorary Rangers.—Several of our members and some others nominated by the Council, were added to the list of Honorary Rangers under the Birds and Animals Protection Act and the Wild Flowers and Native Plants Protection Act. We beg to thank the Chief Secretary's Department and the Local Government Department for their kind attention to these and many other requests.

Our Services to the Public.—Quite apart from the special matters featured in this report—all of which are of public value and interest, this Society has to render constant service to the public in many directions. Letters on all sorts of subjects coming under the head of fauna and flora conservation and protection as well as much natural history information has to be furnished. In addition to the written information, much is given over the telephone. We are very glad to be able to furnish this information but we would ask enquirers and our friends generally to remember that these services cost money, and that every subscription that can be sent along will be put to the very best use in furthering our aims.

Among the special information sent abroad was a comprehensive series of replies to a questionnaire prepared by the Society for the Preservation of the Fauna of the Empire, in London, dealing with protection of mammals, birds, the trade in skins, legislation, administration, National Parks, other Reserves, animal pests introduced from abroad, etc.

Several radio broadcasts and lectures have also been given by Councillors.

Journal.—The first number of our *Journal*—Australian Wild Life—was issued during November, 1934, and was very widely circulated throughout Australia and New Zealand. As it is quite impossible for us to acknowledge individually all the newspapers and other journals who made congratulatory references to the *Journal* and who printed, in the aggregate, several thousands of columns of extracts therefrom—usually with accompanying commendation of the Society's work—we would like here to tender the Society's most sincere thanks for this fine help to the movement. Quite a number of country newspapers, and some journals as far away as America and Honolulu, reprinted whole sections of the contents of our first number.

We have to thank Miss Jean Colditz for a unique cover design which she has drawn for our *Journal* and which will be used for its next issue.

ROY F. BENNETT,
President.

DAVID G. STEAD
Hon. Secretary.



It is difficult to understand the selfishness and lack of kindly thought behind the widespread imprisonment of Magpies, Kookaburras and Seagulls, in people's backyards. Who, having heard the glorious carollings of the wild Magpie or the joyous gurglings of the Kookaburra in the Australian dawn, can be so stony-hearted as to want to deprive the birds of their complete freedom? And what of the backyard Seagull—a miserable depressed creature, compared to that beautiful bird that it was when it sailed over, and rested on, our bay and harbour waters.

NATIVE PLANTS OF NEW SOUTH WALES.

THE ERIOSTEMONS

By Thistle Y. Harris, B.Sc.

Among the most eagerly sought of our bush flowers are the Eriostemons—close relatives of the well-known Boronias. They are members of the family to which the citrus fruits belong (Rutaceae), characterised by the pungent, aromatic odour which comes from the oil glands of the leaves. The Eriostemons have been named by the children Wax Flowers on account of the wax-like appearance of the open, star-like blossoms and as Woolly Stamens because of the woolly hairs occurring on the filaments (stalks) of the stamens. This latter characteristic was responsible also for the generic name which is derived from the Greek: *Erion*, wool, *Stemon*, a thread.

All members of the genus are shrubs, varying from a few inches to several feet in height, with simple, usually bright green leaves, readily recognised by the rich, aromatic odour characteristic of the family. The flowers are open and star-like with their parts in fives—five small sepals, 5 relatively large petals, ten stamens in two rings of five, the filaments of which are covered with fine, woolly hairs, and five parts to the ovary. The flowers readily distinguish them from their close allies, the Boronias, in which the parts are arranged in rings of four and which do not have the hairy appendages to the filaments. After fertilisation the petals coil round the maturing fruit; which, when ripe, consists of four nutlets, each containing one seed. At this stage the petals frequently become darker in colour.

The genus is typically Australian, being confined to the eastern coast, mainly in the south. One species has been recorded from New Caledonia. Although more than twenty species are found in New South Wales, only four so far have been placed on the list of protected native plants. These are: *Eriostemon myoporoides*, *E. trachyphyllus*, *E. Crowei*, *E. lanceolatus*.

Eriostemon myoporoides LONG-LEAFED WAX FLOWER

This is a charming shrub three to six feet in height, which responds readily to cultivation and is the most popular of the Eriostemons for this purpose. It has long, narrow, dark green leaves, in the axils of which the flowers are borne in clusters of two to nine. The flowers are pink or white—usually white in New South Wales—with petals up to a quarter of an inch long. It occurs in New South Wales and Victoria—in New South Wales mainly on the Dividing Range and the Tablelands, and, in Victoria, on granite and other volcanic rocks.

Eriostemon trachyphyllus BLUNT-LEAFED WAX FLOWER

This is a species not so well known as *E. myoporoides*, and so closely resembling it in general appearance that the two species are frequently confused. It is a smaller shrub than the former, not usually attaining a height above four or five feet, and with blunt, prom-

inently tuberculate leaves. The flowers are white and solitary, in the axils. The individual flowers resemble those of *E. myoporoides* very closely. It occurs in similar localities to this species, also.

Eriostemon lanceolatus LANCE-LEAFED ERIOSTEMON

This is a species confined to the sandy shores of Port Jackson, Broken Bay and other inlets of New South Wales. It is our tallest species, attaining a height of eight feet, where the soil is heavier, but reaching only a few inches in height on pure sand. It is very floriferous, even in a stunted condition, and makes a grand sight on many flat, sandy patches right along the coast. The leaves are linear to lanceolate, greyish-green in colour. The petals are pink and hoary, and the flowers larger than those of the two species already described.

Eriostemon Crowei (*Crowea saligna*)

This plant has now been separated from the genus *Eriostemon* on account of the presence of an additional appendage on the tip of the anther. In general appearance, however, it resembles the genus closely, and for the purpose of this paper may be considered under the same generic group. It is a small shrub with dark green, thin, lanceolate leaves. The flowers are bright pink to red, on axillary stalks. It occurs commonly on the coast of New South Wales, is also found in Queensland and in north-eastern Victoria. In Victoria, however, it is a rare species.

CULTIVATION

Most species of *Eriostemon* are readily cultivated and make fine garden shrubs. The late A. A. Hamilton of the Botanic Gardens, found that the seed germinated more rapidly if taken from the plant just before it was fully mature. Seed must be collected fresh or the percentage germination is very low. Sand or very light loam should be used in the seed bed, and the beds covered with glass. Germination will take four to six weeks. The plants should be transplanted, while still very small, to tins (in which previously, the bottom has been cut half way round) and the tin (with the bottom bent back) transferred to a permanent place in the garden when the plant is six to eight inches high. With the exception of *E. lanceolatus* a light or heavy loam is the most suitable type of soil; *E. lanceolatus* preferring sand or very light loam.

DISTANT MEMBERS OF THE W.L.P.S.A.

Some of our members, though geographically far distant from headquarters, are among the closest in our work. To select only three: Mrs. Prider, is away down at Penong, on the shores of the Great Australian Bight. She is a great wild flower lover and is busy on cultivation work. Ann Page, of Frodsley, Tasmania, is one of our very young members, but very enthusiastic. (Mrs.) Ida M. Dalzell of Atherton, North Queensland, is a fine Nature lover, and is doing what she can to keep our great cause going in her own district. I wish we had space to print the whole of her most recent letter, for the enjoyment of other members.—Ed.



A. *Eriostemon myoporoides* Native Daphne
A mountain species of New South Wales which does particularly well under cultivation.
B. *Eriostemon lanceolatus* (*Crowea saligna*)
LANCE-LEAFED WAX PLANT
A sand-loving species very common on the coastal sandstone of New South Wales.
C. *Eriostemon Crowei*
Another common sand-loving species. It never reaches a height greater than two feet.
D. *Eriostemon trachyphyllus* Blunt-leaved Wax Plant
A Blue Mountain species closely related to *E. myoporoides*, but with blunt leaves covered with tubercles.

OCCUPATIONAL CONSERVATION.*

By *Walter B. Griffin*

"Site Planning," "Community Planning," "Town Planning," "City Planning," "Regional Planning," "Country Planning," "State Planning," and "Nation Planning," are only the current tentative names here or abroad for overlapping experiments directed toward attaining greater unity in our use and administration of the land.

Each successive stage has been missing its mark because of deficient consciousness of a larger organic element of which it has sooner or later found itself to be but a part.

Comprehensive Planning will have to learn from Mother Nature the secrets of growth and equilibrium and that conservation which contrasts so strikingly with the devastation to desert conditions that the greatest of man's civilisations have always left in their wake, and which is proceeding at accelerating pace in spite of recent pricks of our consciences, and of all the attempted safeguards possible to our present consciousness.

Castlecrag is an effort toward Land Planning in the fundamental sense of arranging for that use to which the terrain is most suitable. Land in this sense is accorded the respect due to a highly developed and perfected living organism not to be exterminated nor treated as dead material, or as a mere section of the map.

That part of the Metropolitan Unity which comprises the natural setting of Sydney has now gone through a metamorphosis from Botany Bay almost to Broken Bay so complete that without the latter's fortunate survival one would scarcely be able to picture the Sydney of the last century with its justly famous Harbour.

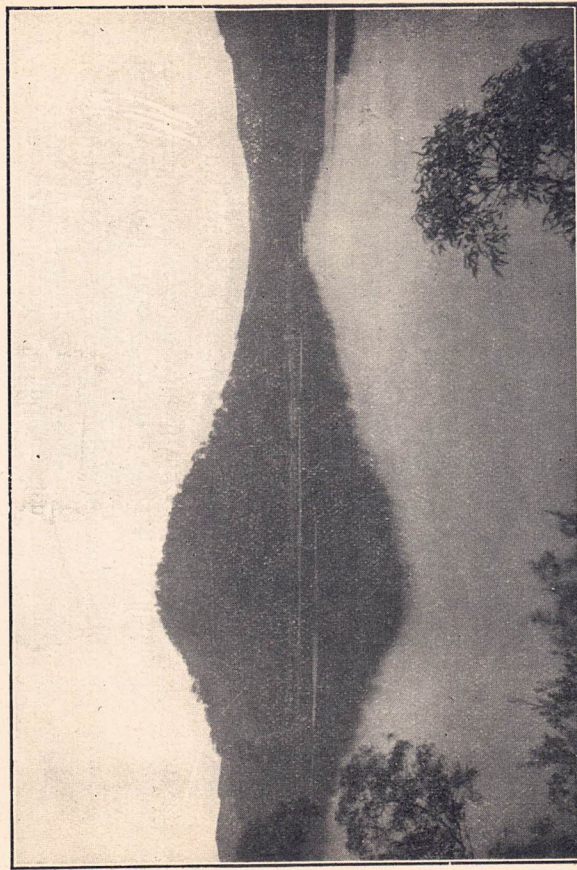
In the eighteen-eighties upper Middle Harbour was chosen by a far-seeing group in advance of the farther Eastern Suburbs for residential development and the monumental Suspension Bridge was built to give access. For this, however, the Government so positively denied either tramway facilities or franchise that the bulk of the territory was precluded from occupation until the days of private motor cars.

Since 1920 the motive of the suburban development of 750 acres of this land in Castlecrag, Castlecove and Covecrag peninsulas, in Middle Harbour within five miles of the City, has been the permanent preservation of the pristine loveliness of some five miles of remnant of the rock bound woodland coves, through the vigilance of numerous interested owners and appreciative rangers.

* The Editor is particularly gratified to have this article from the pen of our Councillor, Walter Burley Griffin, who has achieved such world-wide distinction as an architect, landscape architect and town planner; and to whom we, as wild life conservationists, and as Australian citizens, owe so much for his noble vision in setting out the original plans of our Federal Capital City, and for his monumental work in the area mentioned in this article. Mr. Griffin and his colleagues are, at present, setting out a great example and object lesson for the whole of Australia, in the work of occupational conservation which they are engaged upon, in the areas here described.—Ed.

Whatever benefits may accrue from a general overhead Governmental and public interest, no control that is not localised in the strictest sense possible, i.e., personal, has so far availed to prevent the disappearance of our wild life before the advancing population.

In the present incipient stage of general understanding of nature even the best of our organised communities, authorities and municipalities suffer their reserves to be "improved" or despoliated, gradually obliterating the natural character. It is only necessary to stand on some lookout such as Covecrag to be able to distinguish from all the rest, primitive spots that are under the care of considerate resident owners and not indiscriminately accessible to the public.



COVECRAG

Unfortunately, the cases of personal protective interests are exceptional; and, even for these, the hazards of bush fire, vandalism, rubbish dumping and reckless depredations for flowers, plants, firewood, poles, bee trees, timber, soil, sand, and stone are uninsurable. Notwithstanding these difficulties and the unsympathetic obstacle of the public authorities, the restoration to natural state has already

been noticeable with a resident community of about two dozen families only, and during the period of surveys and construction work of many miles of roads and sewers, as well as playing areas, baths, tennis courts and golf course besides the quarrying and housing.

These operations have not so appreciably silted up the coves as in other sections, because of the general contour alignment of the narrow roads, their early sealing and the drainage precautions taken whenever possible.

The placing of the roads and the allocation of the home sites thus required complete topographic surveys followed by detail personal feature studies in order to determine and to conserve the distinctive formations and flora.

The whole of the shores, the predominant heights, the caves and sculptural rocks are embraced in a connected system of local reserves, which separate and screen the lots apart, at the garden fronts. In the same way the roadside and junction groves and thickets screen and make private their street fronts. Thus, in addition to the site individually occupied by a self-selected nature lover, there is a reserve on two sides, over which, as a contiguous owner, he has an interest through the local Parks Committee of each neighbourhood in which the control of these areas will all ultimately be vested.

At present one Committee administers the Castlecrag Reserves—collecting the 10/- per year provided for by covenant from each abutting lot for the expenses of upkeep and improvement. Nearly two thousand native trees and shrubs have been planted by this means. As the Castlecrag plans provide for general segregation of pedestrian from vehicular traffic, these connected reserves will eventually be provided with woodland short-cut paths and steps with lighting, in contradistinction to the circuitous driveways as required by the gradients, where the land rises in ledges to 330 feet above the tide-water.

The common proprietary interest in the adjacent play space, for the children particularly, of each neighbourhood of homes surrounding such an area, fills a want, and restores a corrective in the social life of a great city, which has been a most important factor of the more healthy country communities.

The Castlecrag social will arise from the consciousness of a unified plan and purpose and provides persuasion and example that have resulted in a practice of not clearing each property, to afford evidence of the personal will or assertiveness that seeks to express itself, in artificial gardens or otherwise, irrespective of justification.

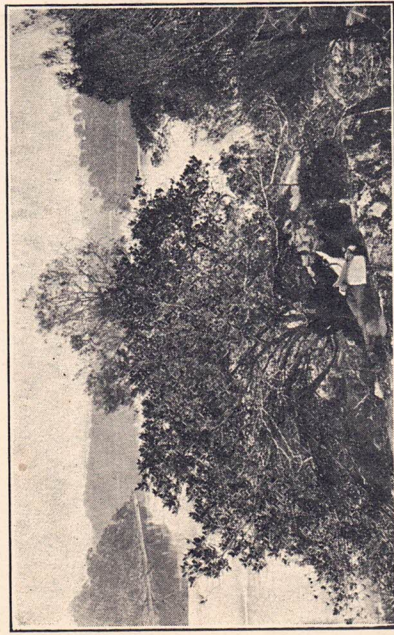
The acid soil of the Hawkesbury sandstone underlying the Middle Harbour headlands has furnished what is undoubtedly the cleanest, most delicate and varied native lignous evergreen perpetually-blooming flora extant. For these reasons no vegetation could

be better to live with, free as it is of rank growth, brambles, nettles, burrs, weeds or plants seasonally untidy. Moreover, it will persist through drought without watering and recover from abuse without help provided the peculiar nature of the soil is respected and manures with exotic seeds are kept out.

Not the least important factor in the conservation of nature here is, however, the covenant-controlled housing to prevent obtrusive or obstructive buildings and enclosures.

The vernacular practice in this respect is all to the contrary, in forms that are unnecessarily bulky as well as uncouth, in colours that are harsh and hot and in construction that is intolerant of the proximity of trees or shrubs as with palings and through the susceptibility of the roofs to fire, climbers or falling branches and the encouragement afforded by the elevated ventilated timber flooring to roots, white ants and vermin.

The typical houses so far exhibit indestructible construction of stone and concrete with flat impregnable terrace roofs and natural stone textures which, wherever they are visible at all, merge with the primitive features and leave the land 100% that rock garden for which it was created.



Middle Harbour, Port Jackson, is still to-day, in many parts, a picture of glorious beauty, a series of magnificent panoramas of bushland, of wooded crags and of deep-set, semi-enclosed extensions of this wonderful harbour waterway. Yet its former beauty, as remembered by some, in the days before the public and private spoiler got to work on its foreshores and wooded heights, far transcended in beauty the scene of to-day. This photograph was taken by David Scott, a fine Landscape Photographer, about forty years ago.—D.G.S.

SOME AUSTRALIAN NATURE BOOKS.

1. TREES AND WILD FLOWERS

By David G. Stead

Author of "The Tree Book," etc.

In entering upon this discourse about our Australian Nature Books, it seems to me to be an appropriate thing that I should preface it by pointing out what a really prodigious debt we Australians owe to Nature study—viewed in its broadest sense—for it is a fact that Australia is, almost literally, the child of bright-eyed Science. Everyone knows, of course, that we occupy this land to-day as a result of the explorations of our gallant Capt. James Cook—whose birthday we celebrate on the 27th day of the present month—but not everyone realises that his discoveries here, were, in a way, purely incidental or complementary, to, the pursuit of astronomical studies in our southern seas, at the behest of a great English scientific society—the Royal Society of London.

COOK'S JOURNALS

Captain Cook's Journals, too, are practically our first Nature books, for here are to be found the first gatherings of importance relating to our land and its natural features—whether topographical or those relating to our fauna and flora. An event of fundamental importance in connection with the momentous visit of Cook to these shores was that he had with him on the "Endeavour" the great botanist, Sir Joseph Banks and the naturalist, Dr. Solander. Extensive collections of our flora were made, under very difficult circumstances, and these collections, as afterwards worked up, stand as a basis for that very advanced knowledge of our Australian plant life which we possess to-day. Some animal collections were also made, but through a number of circumstances—no doubt primarily that Banks was a botanist and not a zoologist—these do not aid us very much in the building of our knowledge of the extraordinary animal life of the strangest of all continents which had been brought to light.

SYSTEMA NATURAE OF LINNAEUS

I should not fail to mention here one very great Nature book which not only influenced the course, and the rate of progress, of nature study, in every country, but which just made its appearance at the psychological moment to aid the investigators who were to do so much in making known the flora and the fauna of Australia. This was the twelfth and last author's edition of the "Systema Naturae" of the great naturalist Linnaeus, which was published during the years 1766-68, and which (according to Sir Wm. Flower) contained a systematic exposition of all that was known on the subjects of Botany and Zoology expressed in terse and precise language. Here was to be found the accumulated knowledge of all the works of zoology, botany and mineralogy "since the world began," collected together by patient industry and welded into a complete and harmonious whole by penetrating genius.

BANKS A FRIEND OF LINNAEUS

This mighty work of the naturalist and philosopher Linnaeus, appeared just in time to be assimilated, in readiness for the assembling of knowledge of an unknown land, which was to offer the most extraordinary types of animal and plant life that the world had ever known. No doubt Sir Joseph Banks had included a set of the three volumes in what was termed at the time, his "fine library of natural history" on the "Endeavour," which sailed from England on August 26, 1768. There can be little doubt that this epoch-making work—one of the great landmarks in the history of our knowledge of science and natural history—made it possible to lay the foundations of a classification (and consequent understanding) of the living wonders of our Australian world, in such a way as to prevent much subsequent confusion. Banks, by the way, as befitted his very advanced intellectual character, was one of the few English followers of Linnaeus at the time, while Dr. Solander was a favourite pupil of Linnaeus.

BANKSIA OR "HONEY-SUCKLE"

The Banksian collections, however, were never described—I mean as one collection—but full use of them was made by subsequent writers dealing with our Australian trees and other plant life. A part of these collections, it is interesting to note, is to be found in the Herbarium at the Sydney Botanic Gardens to-day. Up to the time of the foundation of the colony at Port Jackson, then, the only published descriptions of Australian plant life were those of several kinds of Banksia or Native Honeysuckle—four species from those presented by Banks to Linnaeus, some described by Gartner from fruits and seeds given to him by Banks and some from specimens actually raised from seed taken to England by Banks. I feel that it is of very great interest to mention the latter, as but few people are aware that Australian trees were actually growing in England before the foundation of the colony of New South Wales!

LINNEAN SOCIETY AND AUSTRALIA

Coincident with the birth of our first settlement was the beginning of a rapidly rising interest in Australian Nature; but this was directed mainly to our trees and flowers and only in a very scrappy way to our quaint animal life. This went on for a long time, so that by the middle of the last century, when our flora was relatively well known, our land and water animal life had received comparatively scant attention, on the whole. Another fact of great interest to Nature students is also quite well worthy of mention. Exactly one month after Captain Phillip arrived in Port Jackson, the Linnean Society of London was inaugurated. This is the oldest existing scientific society in our Dominions concerning itself with biological studies, and its foundation had much to do with the furtherance of Nature Study in the young Australia—even though it was mainly in the domain of our plant life.

WORKS OF EARLY EXPLORERS

It is not my purpose, nor would it be practicable, in this preliminary discussion of our Australian Nature Books, to follow the history, in any detail, of the early works concerned with our botanical wonders or with our natural history generally. Many very interesting descriptions of isolated areas or of particular plants or animals are to be found in the early accounts of the settlement at Port Jackson, or in the published narratives of explorers and investigators, of various nationalities, who touched at some point or other, along our extensive coast line. At least this passing reference should be made to such works, for much of our accumulated information to be found in our later Nature books, has been based upon knowledge gained in the way indicated.

"PROCEEDINGS" OF SCIENTIFIC SOCIETIES

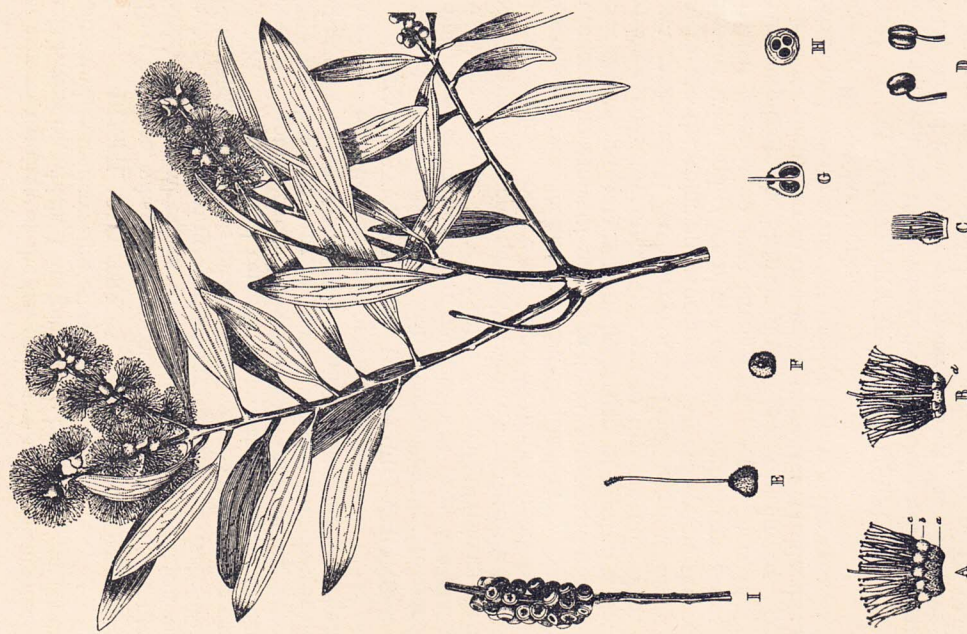
Reference should also be made to the serial Reports or Proceedings of our scientific—and especially our natural history or biological—societies; for, in the wider sense, these are surely to be numbered among our Nature books, containing as they do, a vast assemblage of facts concerning our plant and animal life, as well as those relating to what we term inanimate Nature.

RIISING TIDE OF INTEREST

Mention of these basic sources of information, for the Nature student, naturally calls to mind the difficulty which I experienced when setting out upon this brief survey of what I have termed *interesting* Australian Nature Books. What should I regard as peculiarly Nature Books? And which must be considered particularly interesting? My difficulty is greatly accentuated by a fact which, in itself, is very gratifying. It is this: During the last twenty-five years or so there has been a steadily rising flood of interest in wild Nature in Australia. This has exhibited itself in various ways, such as a love of outdoor life, in every form, bush walking and seaside rambling, actual Nature (or Natural History) study, as well as a study of our natural resources, from an economic standpoint, a widespread interest in forest and other bushland conservation measures, and the preservation of our wild life. Concomitant to all this has been an ever-increasing stream of books and other publications on almost every conceivable aspect of the various subjects—all of which are truly Nature books and most of them of particular interest to one or other of the many sections of readers.

VARIOUS CLASSES OF NATURE BOOKS

Even in the field of Nature books mainly covered by everyday bushland studies—such as wild bird and animal life, trees and wild flowers—there are, among many others, those which may be classified as (a) systematic, that is, of a more or less technical or descriptive style; (b) those descriptive of special groups; (c) general scientific treatises; (d) field Nature study books; (e) ramble or outdoor books which include some branch or other of Nature study as the principal component; (f) those of a definitely educational character, such as textbooks and the like, and, (g) children's or beginners' books, which may be elementary treatises, or in the form of a story. And this does



THE BEAUTIFUL PAPER-BARK TREE

Paper-bark Tea Trees are named for their curious papery bark. They are pioneer trees—which advance very close to water, waiting to take possession of newly-formed land. They grow well in swamps or on wet hillsides, or where they find some local seepage of water.

The Broadleaf Paper-bark (also called Broadleaf Tea Tree, Swamp Tea Tree or White Tea Tree—is most handsome, often weirdly beautiful and mysterious. This tree is a splendid addition to park or boulevard or lakeside, in suitably moist areas. While it makes a fine avenue tree, it is seen at its best in groups placed fairly close together. It is gradually coming into its own for public tree plantings, both for shade and beauty. It is also a fine tree for bees, providing much nectar and pollen. In full flower it is a lovely sight—densely covered with white to cream brushy flower spikes of two to six inches long.

EXPLANATION OF ILLUSTRATION.

A, outside view of flower opened (a) Calyx, (b) Petals, (c) Stamens; B, inside view of the flower opened out, (d) Pistil; C, one staminal bundle with a petal; D, Stamens; E, Pistil; F, Ovary, showing convex summit; G, vertical section of Ovary; H, horizontal section of Ovary; I, Fruiting Spike. After Maiden.

not by any means exhaust the list of groups into which these Nature books fall, and of which, I am pleased to be able to say, there is an unending and ever-increasing stream.

BUSHLAND TREES AND FLOWERS

That being so, what am I to choose in addressing a large group of readers of prodigal tastes, so as to embrace the subject within a reasonable space? Having stressed my difficulty I feel sure that I will be forgiven if, in this bird's eye view I omit even a mention of many highly valuable, and certainly interesting, Nature Books, or if I appear to mention cursorily, volumes of outstanding importance. Probably I will not be very far out in popular preferences if I take the subjects of our Bushland Trees and Wildflowers into the present discourse; leaving other sections for the moment.

NO EASY WAY FOR IDENTIFICATIONS

Though there have been many books relating to our trees—including those concerned with the whole of Australia and such as deal with the separate State or other regional, divisions—there have not been many of a comprehensive nature suited to the consumption of all and sundry. Before we begin to think harshly of authors or publishers, however, let me say that this is largely Nature's fault. With several thousands of species of trees, shrubs and other phanerogamic or flowering plants within the borders of Australia, the task of presenting their study in handy form to the general public has not been an easy one. I have very often been asked to name a book which, to use the common expression, "would enable the reader to identify the trees and other plants that he might come across." The fact is that there is no such single book, nor is there likely to be. The same applies to the identification of our wild flowers. But there is no need for the reader to despair, as there is a considerable number of flowers and trees, readily identifiable by even the tyro, by the aid of some of the popular works.

ELEMENTARY BOTANY USEFUL

Anyone wishing to penetrate beneath the surface of the study, however, should endeavour to master at least the rudiments of botanical knowledge and should obtain one or other of the elementary botany books, such as *Botany for Australian Students*, by the Misses Brewster and Le Plastrier, *Botany for Australian Secondary Schools* by Agnes Brewster, or the handy low-priced little volume called *The Story of our Plants* by Constance Le Plastrier. A New Zealand book, *Botany for New Zealand Readers*, by F. Neve, can also be recommended.

MAJOR WORKS ON TREES

Among the major works on our trees we find those of Maiden and of Baker and Smith. Maiden's work was colossal, but most of it must be sought in the libraries, in such books as *Forest Flora of New South Wales*, issued in parts (ten parts to a volume) between 1902 and 1925. R. T. Baker's monumental work is to be found scattered through various papers, reports, and books available to the

public. Much of Baker's work was purely botanical, of course, but we owe to him an enormous debt for his elucidation of the technological importance of many of our plant representatives; more especially of our Eucalypts. With the co-operation of the chemist H. G. Smith, he produced such great works as *Eucalypts and Their Essential Oils*, *The Pines of Australia*, and others—all magnificently illustrated and containing much of interest to the general reader, as well as to the technologist, the forester and the botanist. No person following the study of our trees should fail to familiarise himself with these valuable and fascinating books, fired with the enthusiasm and love of one of Australia's greatest Nature students.

Along with the perusal and study of the works mentioned we might take Maiden's book on *Some of the Principal Commercial Trees of New South Wales*, which forms Part 2 of his "Forestry Handbook," also Russell Grimwade's very beautiful illustrated book called "*An Anthography of the Eucalypts*"—a second edition of which has recently appeared. You may look upon this book of Grimwade's as, incidentally, one of our finest wild flower books with its more than one hundred plates showing the flowering branches of our Eucalypts from many parts of Australia.

COMPLETE FLORA BOOKS

Those with a more advanced interest in our flora would do well, also, to pick up—or at least refer to in the nearest library—Black's fine work *Flora of South Australia* and Ewart's *Flora of Victoria*, which, although prepared primarily for the botanical student, are readily accessible (with the aid of their complete glossaries) to the intelligent Nature reader. I may include in this group a small but important work published by the Forestry Department of Western Australia—*Eucalypts of Western Australia*, well illustrated with photographs of the trees. All of these are recent.

Those who wish to make a special study of our wonderful rain forest, jungle or coastal brush trees, should specially refer to Francis's *Australian Rain Forest Trees*, recently published by the Commonwealth Council for Scientific and Industrial Research. This is copiously illustrated both with photographs of the trees themselves and of the prime features of identification. Though truly of a botanical character, they will also get much profit from a survey of Bailey's mighty work *The Queensland Flora*, which stands at the base of very much of the work of Australian Nature students who deal with the trees and wild flowers of Queensland and of the Eastern districts of Australia generally. Tasmanians and others interested in our southern flora should remember to include Rodway's book *The Tasmanian Flora*, but neither this nor Bailey's work are recommended for the cursory reader. In view of the general interest of Australian Nature students in our fascinating neighbour, New Zealand, and because of the fact that a number of New Zealand trees are cultivated here, I feel that I should not leave this section without at least a passing reference to a very fine recent work of Laing and Blackwell on the *Plants of New Zealand*, filled with beautiful illustrations.

Obviously one of the most important groups in the Nature books of every kind is that devoted to the beginner. That does not necessarily mean the child, although it includes him. Though there are many of the Nature Storybook type there are not very many to take the beginner by the hand to lead him or her to the more serious side of our studies. Bearing in mind the enormous and increasing scope of our human studies, books of this beginner type—or shall I call them footstools on which to climb to the library—are more and more necessary for almost everyone. Though we in Australia have sadly lacked such books in the past, it is pleasing to be able to record that the blank spaces are being rapidly filled as time goes on. I have by me two of these books relating to Trees which I would recommend to beginners: The first is an extremely useful work by R. H. Anderson on *The Trees of New South Wales* recently published by the Department of Agriculture, in Sydney. The second I mention with some diffidence as it is under my own authorship. But as it is the most recent and deals with the whole of Australia in broad fashion as a kind of pocket handbook, in a way not previously presented, perhaps I may refer to it. This is *The Tree Book*, which forms Number 2 of a Nature series.

WILD FLOWERS

For the better study of our Wild Flowers there are many at least partial aids, and some which are invaluable to bush walker and botanist alike. Notwithstanding this, there is still a great field here for the better furnishing of the public with popular illustrated handbooks. Australia is very famous in the world for its wild flowers—the Sydney-Hawkesbury District and parts of Western Australia, being particularly renowned. It is considered by many authorities that there is no district of similar size in the world so well furnished with such a grand array of wild flowers as the Sydney District, yet there are comparatively few of the species known by name to the average member of the general public. Now there is really no good reason for this, for Florence Sulman's *Popular Guide to the Wild Flowers of New South Wales*, published in two handy volumes, well illustrated, should go far towards removing popular difficulties surrounding nomenclature. There is also her *Australian Wild Flowers*.

The study of the wild flowers, even in a popular way, is hardly separable from that of our trees, of course; more particularly as the flowers are among the principal identification points in making out the particular species of tree or shrub; we should, therefore, not lose sight of the tree books already mentioned, however much we are able to supply our deficiencies in actual picture books of the flowers. Several useful wild flower books have been published in Western Australia. I will mention here, particularly, Mrs. Pelloe's illustrated *Wild Flowers of Western Australia*, which, in addition to a large descriptive list, furnishes the reader with some beautiful plates of a number of the flowers forming this striking western flora.

Readers who are particularly interested in our many beautiful Australian Orchids, are referred, in the first place, to that magnificent old folio work of Fitzgerald's (to be seen—where not otherwise available—in the various public, museum, or scientific, libraries) and to a very handy little reference book by the Rev. Mr. Rupp, of New South Wales. This little handbook is on sale at the present time, and is useful alike to the naturalist and the general reader. There is a great opportunity here, however, for the type of book which is mainly illustrations, as only by such means may we indicate the marvel, beauty and wonder of these bushland gems, of which we have upwards of five hundred distinct species. Some such booklets, of a sectional character, notably of Western Australia, have already been published.

There are also those beautiful booklets of Western Australian flowers, from the camera of Helen Ogden and coloured by Ida Richardson.

AUSTRALIAN ENCYCLOPEDIA

For our northern coastal region we have G. Thomson's *Flowers of Our Bush*, published in Brisbane. Many of the wild flower booklets available to the public in each of our Australian centres are quite excellent, even when only covering a small range of species; and, in the aggregate, several hundreds of kinds, out of our thousands of flowering plants, can be referred to in such publications. But no reference to this subject, or, indeed, to any of our Nature book sections, would be in any way complete without some mention of the *Australian Encyclopaedia*, which contains a very large number of original drawings, and some coloured plates of Australian wild flowers. Like many other outstanding Australian works, we owe this very largely to the enthusiasm and patriotism of one of the greatest friends to Australian literature of all times—the late Mr. George Robertson—and to the firm of publishers of which he was such a pillar of strength for so long.

MAGNIFICENT WARATAH

Some of our wild flowers have been deservedly famous right from the beginning of our history, and so we find Sir J. E. Smith, writing (in his *Botany of New Holland*) 140 years ago, "The most queen of our bushlands, in the following words: "The most magnificent plant which the prolific soil of New Holland, affords, is, by common consent, both of Europeans and natives, the Waratah." By the way, in this early work, Smith gave a most beautiful illustration of the flower, leaves and fruit of this stately plant.

And now, nearing the end of my space for this discussion, I find that I have only been able to treat quite scrawpily of one or two out of the galaxy of subjects which rightly come within our purview.

But before taking leave of the trees and flowers for the moment I should particularly stress the point that, in the aggregate, a vast amount of information on these twin subjects is to be obtained from the many general Nature Study and bushland ramble books which have appeared from time to time during the last few years.

Perhaps at some future time we may discuss some Bird Books. I offer my apologies to the legion of bird lovers for taking the bush before the birds, but without the bushlands there would be no birds, so that at least the order of procedure seems logical.

FEDERATIONS OF JUNIOR TREE LOVERS.

Spurred by the success of the Junior Tree Wardens' movement the Schools Branch of the Australian Forest League is making an attempt to amalgamate Junior Tree Lovers Leagues in one district into Federations.

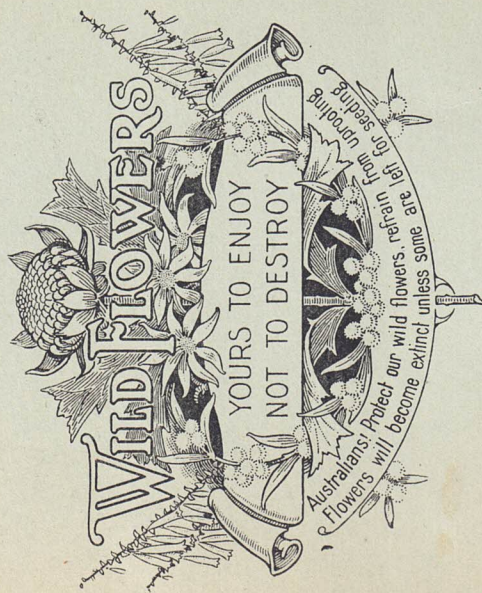
Stated briefly, the aims of such Federations are:

1. To carry the activities of the individual school leagues into wider spheres in an attempt to develop greater civic pride among the younger members of the community.
2. To stimulate co-operative action between the schools combined in the Federation, and Municipal Councils, Department of Main Roads, etc., with a view to the beautification of the district by the planting of suitable trees and shrubs and provision for their after-care.
3. To preserve as much as possible of the remaining native flora of the district.

Two such Federations have already been formed. The first to respond was the Parramatta River Federation with Riverside Domestic Science School as its centre. It has already justified its existence by a ceremony in King George's Park, Rozelle, when 24 Norfolk Island Pines were planted. The second group to be formed was the Illawarra-Bankstown Federation, with St. George Girls' High School as its centre. Stanley Street, Kogarah, was planted by this Federation with 34 White Bottlebrush. In co-operation with the Rockdale Council also, it carried out, during last month, tree planting in Scarborough Park, Ramsgate. The main feature of this was the planting of what should some day be a fine avenue of about 60 of the beautiful Paper Bark Tea Tree.

We hope that by July of next year several similar Federations will be working along parallel lines.

THISTLE Y. HARRIS, Hon. Secretary,
Illawarra-Bankstown Federation of Junior Tree Lovers.





SAVE THE TREES

in all their native beauty. Do not lop or trim unnecessarily. Make the paths fit the trees, and do not cut a tree down because it comes in the way of a new plan of roadways and paths. Even try to fit the roads to the trees, in cutting through in newly-opened country!