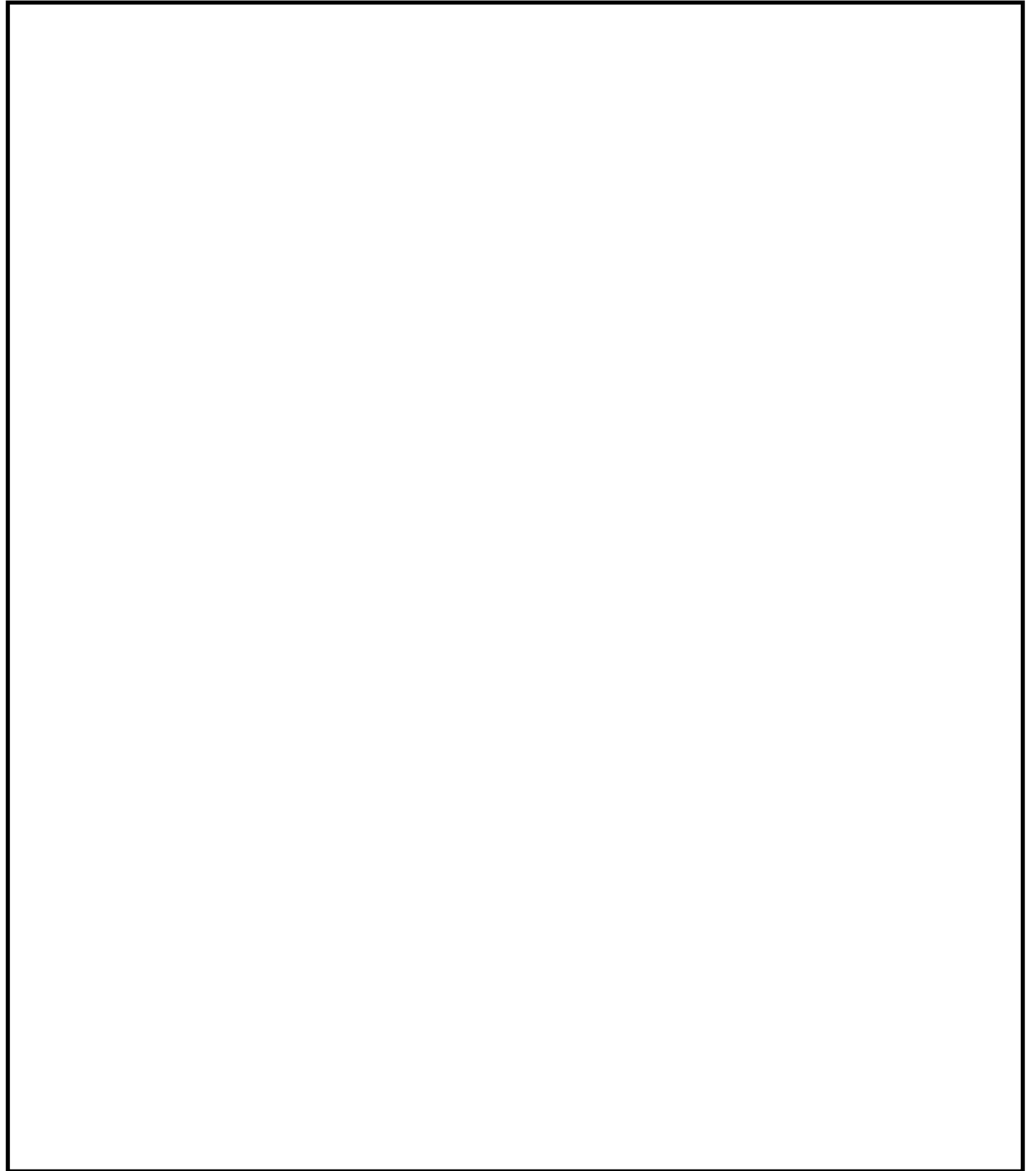


INDIGENOTES



IndigEEnotes Cont:

Editor's Note: Ray Thomas sent these samples in to demonstrate some of the effective environmental education work he's been doing in Benalla and region.

Regent Honeyeater Project

Farmers are an endangered species too! What's in it for us?

It's a lot to save a bird!!

Why should we bother?

Haven't we got lots of other honeyeaters anyway?

Well what about these questions? Are they fair enough in times when farmers are struggling?

Does it really matter if we lose a single species? I think the answer is a very big YES, and that's just a "save the bird at any cost" sentiment.

It's really about saving an ecosystem that supports lots of species; including us. Loss of the Regent Honeyeater is really just one more symptom that the ecosystem is out of balance; taking a nose dive in fact!

The push for "Biodiversity" is more than just a museum mentality. Diverse ecosystems are healthy, self-sustaining ecosystems! When there are many plant and animal species living together, there are built-in checks and balances to keep the system operating for the benefit of all. Plant, insects, birds, predators, birth, decay, nutrient recycling, shelter, habitat - everyone's catered for. And if any one species increase for some reason, then "beauty", there's suddenly more food for something else and these increase to pull the first one back into line.

Simplified ecosystems don't have it so good!

Take for example the scene we've come to accept as normal -scattered trees, grass and no shrubs.

When insects increase following the boosted nutrient levels in pastures, they attack the trees harder than they do in a natural forest. And here's the rub; with no shrubs, there's fewer birds and wasps to pull the insects back into line! The ecosystem is out of balance.

Trees are under constant stress for years and there is extra mortality in tougher summers. As more trees die, the remaining trees each have to cope with more and more hungry insects. They die at a faster rate because the insect attack is more concentrated on fewer trees! It's a downhill, one-way process that eventually can't cope and "the wheels fall off"; the ecosystem crashes.

It has been said that the loss of the wattles from a forest is the start of an "ecological cascade" - a tumbling down of ecosystem health as species after species drops out and the system becomes less resilient and self regulating.

So back to our endangered species. They are "indicator" species which show how tough the going is. Scarce resources, brutal competition that never occurred before, and some species lose out. We call them "endangered" and accuse of having some kind of problem, but we need to look at the problems of the ecosystem itself!

And here's the benefit to landholders - re-establish ecosystem balance and you've got natural biological controls working for you rather than a runaway train with the brakes off!

Some examples will make the picture clearer. Plant Silver Wattle, Golden Wattle and Black Wattles under your old Grey Box and River Red Gums and you can attract glider possums in search of the sugary wattle sap. Then just watch them eat those leaf damaging Christmas Beetles all night!

And then there's all the birds which nest in the understorey shrubs. Did you know that by planting the right shrubs to attract birds, you can put an end to the serious insect attacks which

lead to dieback of your valuable old trees?

And that's only half the story! Nectar-rich shrubs such as Sweet Bursaria, Tea Trees, Rice Flowers and Everlasting Daisies also attract a range of parasitic wasps and flies that are very helpful to the farmer. With nectar as their energy source, these will hunt all day for insect pests like the Cockchafer Grubs and Christmas Beetle larvae which destroy the of your pastures.

The message is simple; balanced ecosystems look after their own health. Restore bushland on your farm by planting understorey under the old trees you still have left, and the bushland creatures will look after your farm.

But to get the ecosystem fully operational, it's obvious that we need to restore as much of the original vegetation as possible. Not "any old tree" will do the same job as the local species. As well as providing long-term habitat for wildlife and biological pest control for your pastures, these local plants are well adapted for survival in our soils and climate, and will replace themselves by natural regeneration over time so that the billion trees won't have to be planted all over again.

With this in mind, the LEAP group and local schools are making a special effort to grow thousands of our local indigenous shrubs ready for mass plantings in the Regent Honeyeater area this winter and spring.

Perhaps you would like to try out the local indigenous plants in your plantings this year. There are plenty of good to give it a go!

If you would be interested in learning more about our local ecosystems, the indigenous plants and animals and how they work together, contact:

Ray Thomas

Land for Wildlife Education Officer

DCNR Benalla Ph. (057) 611 680

And something from the Regent Honeyeater LEAPers themselves...

Benalla's Unemployed: Doing Something for Our Community

When environmental issues are raised, most

people believe there is no hope, but the message that Benalla's strong LEAP is trying to get through to the public is that there still is hope. But it takes a lot more than a group of twelve to make a real difference. That's why we are trying to educate the public in the hope that they will pull together and work at improving our country and world before it really is too late.

Statistics have shown that since 1830, more than 12 million hectares, or 65% of Victoria's forest and woodland has been cleared. Because of the clearing of trees, a parasite called mistletoe (which is native to Australia) has thrived. The five species of butterfly which lay their eggs on the Mistletoe are endangered because they cannot find enough nectar to produce the larvae that eats the mistletoe. When mistletoe grows on a tree it deprives it of nutrients, therefore the tree may wither and die. The LEAP hopes to put back at least 18 thousand of those native trees and shrubs that we have destroyed and also save the ones we have left from mistletoe, salinity, dieback and foreign weeds.

The clearing of our native vegetation is one of the major causes of extinction of our native wildlife, such as the Regent Honeyeater, Grey-crowned Babbler, Brush-tailed Phascogale, Bush Thick-knee, Squirrel Glider, Spotted Quoll and many more species which were and maybe still are resident in the Benalla area. The LEAP is aware of the areas which the species are resident to and to help are fencing and revegetating the areas and building nest boxes.

The LEAP consists of twelve young adults who have been unsuccessful in finding work. The Centre in Wangaratta have employed the youths to help them gain more skills, knowledge about the environment and hopefully put them onto a career path.

Some of the group will be visiting local schools and service clubs to educate children and adults about our environmental problems, our ecosystem and native flora and fauna. We also hope people will volunteer to help with the planting of our trees. If you are interested in getting involved in any of the activities, such as propagation, revegetation or fencing please contact Ray Thomas at DCNR, Benalla.

Kansas Landscape Patterns and Biodiversity

Kelly Kindscher

Adapted from a talk given at Prairie Festival 1995.

Editor's Note: This article comes from a small journal called the Land Report which is published by the Land Institute in Salina, Kansas, USA, in the middle of the North American grasslands or prairie. The Land Institute is an impressive organization working on many fronts. They do much scientific research, much of it in cooperative projects with universities, on sustainable agriculture using indigenous prairie grasses and herbs in perennial polycultures, where groups of perennial plants are grown together without plowing. They also work on establishing a bioregional culture linked to the rhythms of the prairie. One of their main tools is the 'Prairie Festival'. This talk is from last year's Festival. It is another piece of writing with universally relevant ideas but describing the situation in one particular place. I hope you enjoy it.

Biodiversity is defined as the variety and viability among living organisms and the ecological communities of which they are a part. Biodiversity is enormously valuable to humankind, providing food, aesthetic enjoyment and recreational opportunities. It is the source of all domesticated animals and plants, as well as many antibiotics and organisms for biomedical research, and many building materials and other products. Finally, diverse natural communities perform innumerable ecological services upon which all human life depends. These services include moderating the weather, maintaining the quality of the atmosphere, operating the hydrological cycle, producing and preserving soils, recycling nutrients, disposing of wastes, and providing biological control of pests and agents of disease.

We have greatly altered the biodiversity of our local landscapes. We need to realize that not all biological diversity is equal, especially close to home. Our most important biodiversity is the wild, natural diversity of each place. We can do a lot of things to increase biodiversity, but they may not always be wise. To use the example of a garden, we can add species to increase biodiversity, but we may not want to add ragweed or add insects that eat our vegetables, or add exotic plants that spread across the landscape. It's not just the largest total of species that we want. It is more

valuable to increase biodiversity in ways that strengthen the whole system, that add more pieces that connect it. We live in a time of massive environmental fragmentation. We have been ripping apart the many interconnecting strands of biodiversity, and we don't even understand what most of those strands and connections.

A good portion of my work at the Kansas Biological Survey involves inventorying native plant communities. So, far we have only inventoried 3-5% of the native prairies, woodlands, and wetlands in our state. We now recognise about forty distinct plant communities. In terms of just prairie [open treeless plains] types, we recognise differences between glaciated tallgrass prairie, Flint Hills tallgrass prairie, southeast Kansas tallgrass prairie, Smoky Hills mixed grass prairie, and shortgrass prairie in western Kansas. In addition, there are numerous wetland, woodland, forest, even sparsely vegetated communities like chalk flats out in Gove County. Some of these communities are still

common today; others are not very common at all, and some are extremely rare or threatened.

One plant community that has become very rare is the savanna [grassy woodland]. Before white settlement, Saline County, Kansas was 99% prairie. The Smoky Hill River and tributary streams had cottonwoods, willows, and also bur oak along them. There was a transition zone where the fire-tolerant oak and tallgrass prairie met. This shifting transition zone was the savanna community, a combination of an oak forest and a tallgrass prairie.

Savanna communities are essentially gone from Kansas because we plowed up tremendous portions of the landscape and totally altered it. We killed off the buffalo and other large herbivores that roamed freely while grazing. We replaced part of that grazing component with the cow, which serves some of the same function, but is confined by fences and grazes differently. Of great importance, we quit burning most of the landscape, except for some rangeland areas such as the Flint Hills. But other large communities that require fire, such as the savanna, no longer receive its beneficial effects. Burning savannas favored the grasses and wildflowers and discouraged trees. Bur oak trees are fire tolerant, so fire might have killed or stunted some of the young oak trees, but it didn't kill them all. It did keep out most of the other trees, producing an open oak savanna. The people who settled near savannas often plowed close to the trees and put up fencing to graze cattle under the oaks. They did not burn the woods and the savanna area, and light grazing alone was not sufficient to discourage all woody species. So the savannas have grown up to denser woods, and the grasses and sunlight-tolerant wildflowers are gone. It's very difficult to find big bluestem, little bluestem, or prairie wildflowers underneath or between any mature or "old-growth" trees in Kansas. That community type is now very rare. In fact I know of no high-quality example of savanna in the central part of the state.

What else have we lost? We've lost wildflowers across the state and region. Where have all the wildflowers gone? If you were sitting on almost any spot in Kansas on a spring day two hundred years ago, you would see a myriad of wildflowers scattered everywhere across the landscape. Even the forests were originally full of wildflowers, many of which were tender, delicate species. If they were plowed up, most of them did not come back. If cattle repeatedly grazed

them to nubs, they died. If the landscape was not burnt, they were overgrown by other species. We have altered the landscape so much that we no longer have most of the wildflowers that used to be here locally. This is a major loss to our local plant diversity, which also greatly affects animal diversity. Even a small but high-quality prairie remnant such as the Wauhob Prairie at the Land Institute has close to 100 species, of which two-thirds or even three-fourths are wildflowers. When you look at a piece of land - whether it is prairie or forest - and you see a lot of native wildflower diversity, you're likely looking at a natural community that's still fairly intact.

We need to think about bringing those pieces back - restoring the communities, restoring the species. One of the problems we have in restoration, though, is that to reach a high level of biodiversity is a big task. It's very hard to restore all the pieces of a prairie. First of all, in many areas we don't have much prairie left. There are croplands all around, so how are the seeds going to get to a restoration site? They can't do it by themselves. Some seeds are windblown and can come from a long distance, but the majority of prairie seeds, unfortunately, are only dispersed short distances by gravity, insects or animals.

At the University of Kansas there is an experimental tract in which native grasses were planted in 1957, adjacent to a wonderful native prairie. Now, nearly 40 years later, it's still easy to see which is the native prairie and which is not. One has rich diversity, the other doesn't. There are about 170 species on the native prairie, compared to only 75 in the replanted tract. The species haven't moved more than a few feet into the edge. Even where the replanted tract now has one of these conservative prairie wildflower species, it may only have five specimens, whereas the native prairie might have five hundred, or five thousand.

What is going on? Why don't the wildflowers just move across into the restoration area? Possibly the soil eroded and lost nutrients when the land was cropped, but more likely, the wildflowers don't move into a new site for a combination of other factors. Ants distribute seeds, maybe the right ants aren't there; some of the legumes need rhizobium bacteria, maybe they're no longer present; and the orchids need their own symbiotic organisms to germinate, maybe they're not there. There's a multiplicity of reasons, many of them species-specific, many of them landscape related. For

whatever reasons, the majority of wildflowers don't move back.

We can restore prairie on the very small scale by transplanting soil and plants, using a spade. On a small scale, planting seedlings and transplanting is fun - people really enjoy doing it. On a small scale, seedlings can be watered, watched, and tended; success can be achieved. So on a small scale we can see a return of the biodiversity. Big on the big scale, the scale we have altered the landscape, it is difficult to establish large numbers of species. I've been planting a lot of prairies on the big scale, and I haven't had much success. If I get thirty to forty native prairie species out there in a forty acre tract, I'm doing pretty well. But what I really want is two hundred. I don't know how to do that on a large scale.

Restoration should never be an excuse for losing something. We need to protect what we have left, and tradeoffs can't do that. We don't know enough to put all the pieces back together. Since regulations are seldom adequate, and restoration usually comes after the damage is done, we need other kinds of land protection. The best to protect land, according to an organisation like the Nature Conservancy, is to buy it. Great; if we can buy, let's buy it. But frankly it's hard to raise environmental dollars and there is a tremendous need for land protection.

Another way of protecting land is to use conservation easements. Conservation easements allow the landowner to lock in the use of their land by signing an agreement with a nonprofit organisation, such as the Kansas Land Trust, the Nature Conservancy, or the State of Kansas. The landowner can ensure that nothing will disturb the prairie or forest, no matter who owns the land in the future. Conservation easements can also protect land used for agriculture. Easements are a great tool, particularly for anyone who wants to see their land maintained as it is. It allows land to remain as private property, but the right to alter the land has been donated to a group which is legally bound to never act on that right.

Regulations, restoration and protection are all difficult paths to protect or enhance biodiversity. I think what's most important is a change of ethics. As Aldo Leopold suggested, the public should scorn those who still despoil our natural areas. We need to instill an ethic that makes people much more conscious of their landscape changing practices. We need to be able to

identify and speak for biodiversity. To be harmonious with our environment, we need to incorporate the wild into our lives. We need to reestablish our link with native species. One simple thing we can all do is to bring some wild plants home to where we live. That is a wonderful symbolic event. If you plant butterfly milkweed or wild roses or any of the native prairie grasses in your front yard, people will ask you about it. It's amazing, but we have to educate one another about native grasses, even though the dominant landscape that most people interact with is a grass landscape. We can still call a yard or a lawn.

We also need to think about incorporating human use back into the wild landscape. Our original landscapes was managed by Indians. Why did they manage it? They weren't just pyromaniacs like some of us. They lived from the prairie. When they burned off the dead grass, the tender young grass attracted the bison. The Indians also encouraged useful plant species like chokecherries and wild plums. It's a natural thing to set fires, and the place where we live has a history of being managed by people. We should honor that long-term tradition and become managers of fires ourselves, setting them in appropriate places and in ways that are best for restoring biodiversity.

As residents of the Prairie Bioregion working to restore biodiversity, we need to restore the use of wild plant and animal species, too. We need to put plants such as prairie turnips, wild plums, or chokecherries back out there in the landscape for use as food; and to make use of the purple coneflower [*Echinacea* sp.] for medicinal purposes. The most widely used plant food of Great Plains Indians was the prairie turnip. There are very few of us who have eaten prairie turnips. Why haven't more of us learned about this food plant? These practical connections to plants and landscape can help us restore biodiversity, because they will encourage us to continue the renewal process of returning the wild to our homelands.

Each of us can speak for the value of biodiversity, and its importance in land use planning for our community or state. If we speak clearly for the value of protecting wild places and natural communities, others won't build on it, or degrade it as quickly. I see a lot of houses built on native prairie. Why? Often people don't even know what they're building on. Also wild lands are usually cheaper than farmland. I think a lot of those houses wouldn't be built if people knew what they were destroying. They might build their house on

From the Editor:

I've now returned from my month-long trip to the Snowy River and Gelantipy Plateau in East Gippsland. It was an excellent break from the routine of the city, and Indigenotes for that matter, and I'll be speaking about it for our next meeting if you want to come along. I'd like to extend my thanks to Michelle Lauder for filling in for me in January; I think she did an excellent job as she has done in the past.

We also have a new committee after our AGM late last year. Most of the faces are the same but there are some changes. Neil Gardiner is still treasurer and has now also taken up the role of membership secretary. This means that Neil has the enviable task of updating our accounting systems and our membership database. He will be doing this over the next few months so if there's any problem please be patient or give him a ring if necessary. Lill Gillan is our new Secretary and has been making valiant efforts to take minutes in our committee meetings, not an easy task considering how the committee tends to talk around many issues, occasionally all at once. Libby Anthony has also been added as a general committee member. Please remember, any member is welcome to come along to the committee meetings.

I would also like clarify the use of the post boxes. For any material for Indigenotes, from newsletters to articles and snippets, send them to me at:
P.O. 228
Preston 3072
For any membership cheques and correspondence for the IFFA committee in general please send these to:
P.O. Box 328
Clifton Hill 3068
This is IFFA's official post box and all material for the treasurer or membership secretary should go to it.

I will now make my usual plea for material for Indigenotes. This newsletter is made up of contributions from readers and members. Please keep the information flowing; I need articles, interesting snippets, information about new books, conservation issues needing attention and graphics as well. Please send in any comments about the structure or content of the newsletter as well as contributions.

I wish to make a special plea for Coming Events. I think the new structure is working well (what do you think?) but we need more newsletters and people to check our dates.
Thanks, Lincoln Kern

land that has already lost its wildness. People become conscious when we educate them. That's what our task is, to actively share what we know about wildness and biodiversity.

I don't know how to restore a prairie. I know how to start restoring a prairie. I don't expect you to know how to do it either, but I would like each and every one of us to be able to speak to the possibility of restoring a prairie. Speak to the vision that we could restore enough prairie that there would be prairie chickens back in suburban areas again, or that there could be plums or chokecherries or purple coneflowers or even prairie turnips for people to harvest from our recreated wilds. Even if we don't individually know all of the pieces or all of the steps to get there, we can speak for the vision. Please join me in this effort.

Kelly Kinscher is an assistant scientist at the Kansas Biological Survey at the University of Kansas.

Coming events:

For IFFA events see back cover

Conferences/Workshops/ Talks

Wednesday 28th February 7pm "Friends of Evans Street Grasslands Annual General Meeting". All welcome, come along and visit the grassland you help to save.

3 March: Clean-up Australia Day 1996. **There will be, as usual, numerous sites across the suburbs and the country where litter, large and small will be collected. Contact your local council, Cleanup Australia Day Melbourne at (03) 9429 8621 or Cleanup Australia Ltd. Toll Free 1800 024 890.**

15-16 March 1996 at the Hyatt Kingsgate Hotel, Sydney. Presented by the Australian Institute of Horticulture. "Can Australian horticulture answer the challenges of the 21st century?" The conference will look at such issues as reclaiming and rehabilitating contaminated urban sites; water supply and conservation; integrated pest management; sustainable domestic landscape design; and many others. Keynote speakers include Robyn Williams, AM; Dr. Robert Spooner-Hart, Senior Lecturer in plant protection at the University of Western Sydney, Hawkesbury; and others including Robin Buchanan, bushland regenerator and TAFE lecturer. Contact Hildegard Wilkinson, AIH Administrator, 15 Bowen Cres., West Gosford, NSW 2250. Ph. (043) 254088; Fax (043) 242563.

Sun 24 March "1996 Friends Seminar", Burnley Horticultural Institute, Swan St. Richmond. This year the theme is "Hanging on to what we have!", with particular reference to indigenous vegetation protection and enhancement. A team of 'down to earth' speakers and workshop leaders will head this essentially practical seminar. Details available by sending a self-addressed stamped envelope to the Friends Network Committee c/o VNPA, 10 Parliament Place, East Melbourne 3002.

Sat 30 - Sun 31 March 1996 "Fern Show" at Holmesglen College of TAFE Waverley Campus Auditorium, 585 Waverley Rd., Glen Waverley (Melway 70 K3). Open 10am - 5pm. Native and Exotic Ferns, Plants, Spore and Book Sales, Free Sample Fern. Adults \$3, Concession \$2 and children free. Organised by the Fern Society of Victoria.

Landcare for Educators Vacation Course, Creswick. Course 1: 15 - 19 April 1996 and Course 2: 30 Sep - 4 Oct 1996. A course designed for teachers, community educators and anyone with an interest in landcare education. Presented by the Department of Conservation & Natural Resources & The University of Melbourne - School of Forestry Creswick. For further enquiries contact Trish Kevin & Geoff Park, DCNR - Creswick Nursery & Landcare Centre. Tel 053 452 200 or Fax 053 452 795.

April 17 - 21 1996 "Coast to Coast '96" - Australia's Coastal Management Conference. To be held at The Grand Hotel, Glenelg, Adelaide, South Australia. The conference aims to focus on community action through integrated coastal zone management, and capacity building for coastal managers. For more information, or if you are interested in submitting a paper, contact Coast to Coast '96 Secretariat, Sapro Marketing, PO Box 8253 Hindley Street, Adelaide SA 5000. Tel (08) 212 7555, Fax (08) 212 7148.

April 25, Thur 'Thornbills' 8pm. A Bird Observers Club Study meeting. The guest speaker is Jill Plowright. You will need to book early. To be held in the BOCA library at the rear of 183 Springvale Rd, Nunawading. Supper is provided. Cost is \$5 members or \$10 non-members. For bookings contact (03) 9877 5342.

September 30 - October 3 1996 "Australian Weeds Conference". The Weed Science Society of Victoria Inc., in conjunction with the Council of Australian Weed Science Societies, will be hosting the eleventh of these triennial conferences at Melbourne University. The conference will focus on the significant land use systems - cropping pasture, public lands, forest rangelands and urban areas. For further information contact Chris Knight, Promotions Officer, Australian Weeds Conference, PO Box 987, Frankston, Vic 3199. Tel (03) 9619 2603, Fax (03) 9619 1756.

27 - 31 October 1996 13th Conference - "Fire & Forest Meteorology - International Perspectives on Landscape Fires". These series of conferences have been open, research meetings organised by the American Meteorology Society and the Society of American Foresters. This 13th conference will be the first one to be held outside of North America and is to be held at The Cumberland Resort, Lorne, Vic Australia. Topic areas will include: fire ecology, fire management, fire disaster planning, media issues, smoke, meteorology/climatology, fire physics, modelling, and urban interface issues. A second announcement will be distributed by the organisers mid year calling for papers and registration forms. If interested in finding out more contact IAWF, PO Box 328, Fairfield, Washington, USA 99012.

25 - 27 November 1996 "Australian Plants in the Rural and Urban Environment". Third Biennial Australian Plant Seminar presented by Karwarra Australian Plant Garden, Kalorama, Victoria. Further information contact Ms. Marilyn Gray, (03) 9738 4256.

Excursions and field trips

Sat 24 Feb Field Trip to Buxton - Storm Creek. 10.30 am. Organised by the Field Naturalists Club of Victoria. John Eichler will lead the excursion to see some rare plants in Sub-alpine Heathland and Cool Temperate Rainforest. The Venue will be at Silver Gum Reserve, Maroondah Highway (3 km south of Buxton). Contact Noel Schleiger (03) 9435 8408.

Sat 24 Feb Leadbeater's Possum Stag Watch. Enjoy an evening of stagwatching and spotlighting for the endangered Leadbeater's possum in the Mountain Ash forest of Victoria's Central Highlands. Organised by the Victorian Field Naturalists Club's Fauna

Survey Group. Contact Ray Gibson on (03) 9874 4408 AH. Another evening of Stagwatching will also be held on Sat 23rd of March.

The City of Knox and the Knox Environment Society are sponsoring a series of workshops and field trips between now and June to help teach the public about Knox's Natural Environment. Bookings are essential; phone Darren Wallace on B/H 018 102 148 or A/H 9729 3804. They include the following:

Sat 2 March 10am-4pm and Tues 5 March 9pm-3pm - Indigenous Plant ID with Greg Bain and Jody Cant.

Sat 16 March 10am-4pm and Tues 19 March 9pm-3pm - Remnant Vegetation, Reserves and Roadsides with Darren Wallace and trips to local bushland sites.

Sat 9 March "Farm Walk at Tarrawarra Abbey for Landcare Month". A walk coordinated by the Yarra Valley Tree Group in Yarra Glen at one of their past treeplanting sites. Contact Stephen Fletcher on (03) 9730 1517 for the exact time and meeting point

Sat 23 March Seasonal Wetland Plants at Bolin Bolin Billabong. A field trip organised by the Field Naturalists Club of Victoria. Damian Cook will point out some of the more inconspicuous, yet fascinating flora of Yarra River billabongs, starting at Bolin Bolin. Will meet 10.30 am at the 1st car park into Bulleen Park (melways 32 C9) Contact Noel Schleiger on (03) 9435 8408.

Regular Restoration Activities

1st Saturday of the month:

Greenlink Box Hill - also every Monday and Tuesday at 10am. Minette Russell-Young (03) 9898 1364.

FO Gellibrand Hill State Park - 9.45am. Mark Corr (03) 9557 2783

Loughies Bushland - Nth Ringwood 9.30 am. Meet cnr Kubis & Werac Drv. Carole Clarke (03) 9870 8126.

1st Sunday of the month:

FO Evans Street Grasslands - 9.30am. Helen Graesser (03) 9744 4097 (Mel 113 811)

FO Fourth Hill Warrandyte SP - 10 am - 12 noon. Meeting place varies. Dave V. Bockel (03) 9844 2659.

Heathmont Bushlinks - works in 5 different areas 10 am - 1 pm. Roger Lord (03) 9870 5262.

2nd Saturday of the month:

Wuurundjeri Garden - 10am. Dorothy Sutherland (03) 9818 4706 (Mel 45 A11)

FO Timber Reserve - 2 - 3pm. Brian Phefley (03) 9844 2659 (Mel 35 G3)

Tereddan Drive Reserve, Kilsythe - in July working bee is the 3rd St. Graham Lorimer (03) 9728 5841.

2nd Sunday of the month:

Gad's Gang at Stony Creek - Mark Gardner (03) 9844 3799 (Mel 23 C9)

Greenlink Camberwell - 3pm. Diana Burgess (03) 9809 2092 (Mel 60 E7)

FO the Common, WarrandyteSP - Kim Dowcra (03) 9876 3807, Deb Parker (03) 9846 2214.

FO the Hundred Steps, WarrandyteSP - Keith Vagg (03) 844 1457.

FO the Point (Nepean) Meet 2pm near the Information Centre. Ongoing Project: Polygala clearance. Stuart Sherren (059) 841 953.

FO Sherbrooke Forest - 9:30am. "Mapping Survey". Main Entrance Picnic Ground (Melway 75 G2). Bring clipboard, pen and compass. Marten Finger (03) 9754 3548.

Friends of the Yarra - 10am. Also Wednesdays. Judy Rutherford (03) 9347 2252 (Mel 2D D7)

3rd Saturday of the month:

FO Bradshaw Park - 10am (9am in Nov & Dec). Dave Bainbridge (03) 9580 5992 (Mel 87 E10)

3rd Sunday of the month:

Men of the Trees - 10am. Minette Russell-Young (03) 9898 1364 (Mel 2D D6)

Meander (Menzies Creek & Emerald Tourist track) - 10am. Kate Forster (059) 685 828 (Mel 125 F12)

Brunswick Tree Group - 10am. Eric Ward (03) 9388 2123

FO One Tree Hill - Diane Silveri (03) 9710 1331

Osborne Peninsula Landcare - Margaret Dimech (03) 9844 3812 (Mel 23 J9)

FO Pigeon Bank Creek - 2pm. Linda Bromilow (03) 9844 2541 (Mel 23 J6)

FO Wanderslore Reserve - Launching Place 10am. Meeting and activity day.

FO Tindals Wildflower Reserve - 11am. Kim Docwra (03) 9876 3807 (Mel 35 A3)

Fourth Saturday of the Month:

FO Sherbrooke Forest - 2pm. Project Afternoons in various locations in the forest. Ring Marten Finger (03) 9754 3548.

Fourth Sunday of the Month:

[Sometimes the last Sunday and sometimes not...]

FO the Collins Settlement Historic Site, Sorrento. Meet 2pm to help maintain plantings. Contact Stuart Sherren (059) 841 953.

FO St. Helena Bush Reserve, Greensborough - 10:30am. Various activities including wildflower walks and weeding Briza. Lawrie Rigg (03) 9434 6685.

Last Saturday of the month:

FO Organ Pipes National Park - 10am. Carl Rayner (03) 9331 2810

Last Sunday of the month:

Friends of Royal Park West, Melbourne - 10am. Mick Arundell (03) 9380 8075 (Mel 29 C12)

JB Hubbard Reserve - Nth Ringwood. Carole Clarke (03) 9870 8126.

FO the Helmeted Honeyeater - 11am. Nursery activities - Healesville. Jeff Dickinson (03) 9568 2768.

Week day activities:

FO the Koorngong - first Wednesday of the month at 10am. Cathy Willis (03) 9844 1841.

FO the Koalas inc - Koala counts are held at the Koala Conservation Centre, Phillip Island, every 2nd Tuesday of the month. Contact (059) 522 407.

FO Sherbrooke Forest Project Mornings - 9:30am every second Wednesday. Various locations, ring Marten Finger (03) 9754 3548.

FO Stane Brae - second Wednesdays 10am. Ron Taylor (03) 9844 4285.

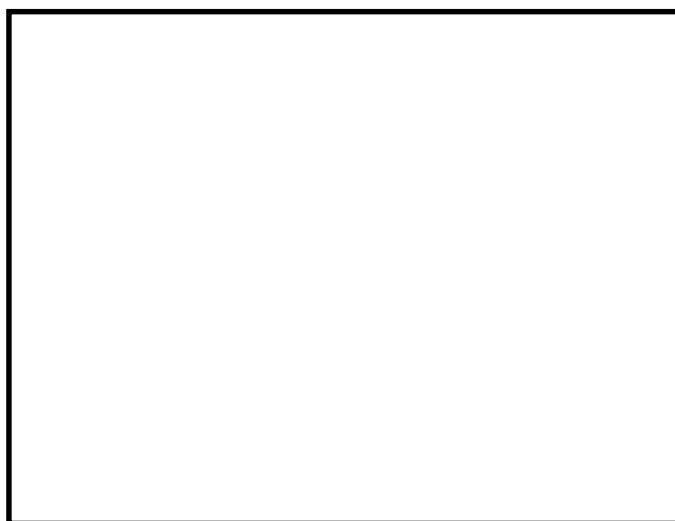
FO Warrandyte State Park nursery activities - every Thursdays at 10am. Afternoon activities: walk, flora fauna park skills. Contact mike Coupar (03) 9903 9567.

For Australian Trust for Conservation Volunteers activities, contact ATCV: (053) 33 1483

A large range of activities such as bushwalks and "Friends" activities are published by the Victorian National Parks Association in their newsletter. For details contact VNPA on (03) 650 8296.

Visitors/participants are welcome to all events listed in Indigenotes.

Thank you to all the people who contact us regarding on-coming events their groups are organising. If you wish to have your events covered, or you can see corrections that need attention, please contact Elissa Kerassitis AH on (03) 9379 1116 or through IFFA's mailing address.



Snippets:

The Secret Life of Tree Ferns

A DCNR report has shown that treeferns and other understorey plants can outlive their towering eucalypt overstorey many times over. When William the Conqueror was crossing the English Channel, when the giant pyramids were being built by the ancient civilisations of Central America, today's trees ferns were just small green shoots in our forests. These ancient plants are now being crushed under bulldozers and burnt as 'rubbish' as part of the State's 'ecologically sustainable' forest management.

The report, based on radio carbon dating of tree ferns in 80 year old mountain ash forests near Toolangi, shows them to be from 330 up to 2000 years old. The slow growing soft tree ferns, the tallest of which was 5.3 metres, had average growth rates of one centimetre a year. The report showed that although the ferns survived bushfires, their survival rates plunged by 95% in logged areas. The remaining 5% of tree ferns in clearfelled coupes were badly damaged and continued to decline. The National Forst Policy, which Victoria is a signatory to, states that the composition of flora and fauna communities should not be irreversibly changed by human intervention.

Mr. Stephen Mueck, former scientist with the flora unit of DCNR has charged the State Government with feeding the public 'bullshit lines' over their supposedly ecologically sustainable management of forests.

Tree ferns play an important role in the forest ecosystem by providing a nursery site for other plants and by creating a blanket effect to keep the forest understorey moist. Steve Mueck, who resigned from the Department in March last year, has said that current logging practices have destroyed the natural ecological processes which differentiate a forest from a plantation.

The other plants which were dated as being between 200 and 500 years old were the Forest Geebung and the Musk Daisy Bush. Geebungs have been shown to only produce viable seed when very mature - at around 200 years old. Clearfelling forests every 50-60 years may eventually cause their extinction. Once again, this demonstrates how little our government foresters know about the forests they claim to be managing 'for all values'. Jill Redwood/The Age 14/11/95

Source: Potoroo Review, No. 149, environment newsletter of Concerned Residents of East Gippsland.

Critically ill forest put on long waiting list

The Victorian National Parks Association's campaign for a Land Conservation Council review of Box-Ironbark forests has finally paid off with the announcement by Minister Mark Birrell that the study will go ahead. However, the LCC review is likely to take several years, during which time precious Box-Ironbark remnants will continue to be logged and lost. VNPA is therefore calling for a moratorium on all destructive activities (logging, mining, grazing...) during the study period, and it is hoping the LCC can come up with some rather more inspiring conservation recommendations than the pathetic offerings of the Marine and Central Highlands reviews.

Source: VNPA Newsletter December 1995

ANGAIR Regeneration Project Report

Long term members of ANGAIR [Anglesea, Aireys Inlet Society for the Protection of Flora and Fauna Inc.] will no doubt be aware that ANGAIR undertook a ten year study of the heathlands following the wildfire of 1983. The report of this study has now been completed.

The first draft of a paper entitled 'regeneration of heath and heath woodland vegetation one to ten years after the wildfire of 1983' has been prepared by Margaret Polmear for submission to 'Proceedings of the Royal Society of Victoria'. Drs. Gretna Weste and David Ashton have agreed to informally review this draft during January 1996. Ten year vegetation profiles are being prepared by Ruth Hirst for inclusion in this paper. These will be available by the of February 1996. It is anticipated that a final draft will be available for ANGAIR approval and submission for publication by early April.

Data collected in the Forest, Swamp, Fern Gully and Sand Dune communities 1-10 years after fire is being collated and analysed by Margaret Polmear for publication as two further papers. Margaret Polmear

Source: ANGAIR Newsletter No. 1 February 1996

National Estate Grants Program 1996/97

Funding for Aboriginal, Historic and Natural Projects

Victorian Component

Applications are invited from eligible community, professional and government organisations for grants to assist with projects which identify,

conserve and promote places of natural, cultural, Aboriginal and historic significance throughout Victoria.

Projects which address nominated priorities under the program's general project areas are encouraged with a particular emphasis on:

- conservation work and conservation planning for threatened places entered in the Register of the National Estate or the Register's Interim List.

For the full list of project priorities, guidelines and application forms for the Victorian program please phone Anne van de Meene, National Parks Service, Department of Conservation and Natural Resources, Tel: (03) 9412 4927.

National Component

The National component of the National Estate Grants Program is designed for projects which cover more than one state or have some reason of national relevance. Application forms, project priorities and further information about the National component are available from Australian Heritage Commission, Tel. (06) 217 2192.

Applications close Friday 29 March 1996

Threatened Plant Translocation Guidelines

Translocation Working, Draft Guidelines for the Translocation of Threatened Plants in Australia

The first draft of the this document is now available for comment. The Working Group is seeking responses from members to assist in further development of guidelines for translocating threatened plants Comments can be sent to the Convenor, Maria Matthes, NSW National Parks and Wildlife Service, P.O. Box 1967, Hurstville, NSW 2220. Ph. (02) 585 6826.

If you would a copy of the Draft Guidelines, please send your address details to the ANPC National Office, GPO Box 1777, Canberra ACT 2601 or fax (06) 250 9599.

Snippets Cont.:

Roundup Kills Frogs?

A recently published report by the Western Australia Department of Environment Protection showed that "Roundup 360" weed spray was capable of killing frogs and their tadpoles. Liberal MP Richard Evans has called on the Federal Government to urgently commission studies into the

Action Page:

Timboon Bushland Cooperative Ltd. Help Save The Bush!

Lets get together and:

- **help save a valuable area of bush.**
- **enjoy visiting, picnicking or walking on the land.**

A cooperative has been formed to purchase a 71 acre block of bush 3 km north of Timboon, adjoining the Timboon-Glenfyne Railway Reserve. The aim is protect and enjoy the bush and to manage the land to enhance its conservation values. Once purchased it will become the only community owned and managed bush block adjoining the Reserve.

The bush changes from messmate stringybark forest on an accessible ridge to a string of massive manna gums and blackwoods next to Powers Creek. It has significant habitat values, and will help maintain the viability of wildlife populations along the Railway Reserve. The Railway Reserve corridor runs from Timboon to Camperdown, and has outstanding conservation values, supporting populations of yellow-bellied gliders, rufous bristlebirds, glow worms and tree ferns.

The cooperative has been registered, the directors have been appointed and it meets on the 4th of each month. The cooperative needs to raise \$60,000 to buy the land and they need shareholders. The minimum shareholding is 250 X \$1 shares, which means that we will need 240 people to contribute. So if you're willing to buy a \$250 share in this noble effort please act soon; the option to buy is running out soon. For further information contact either Eric Ward on (03) 9388 2123 or Shirley Duffield on (055) 662319 or by writing to the Secretary, Timboon Bushland Cooperative, RMB 4343, Cobden 3266.

Point Lillias Port and Bulk

Liquid Chemical Storage Facility

Environmental Effects Statement (EES) Planning Scheme Amendment EPA Works Approval Application

Fletcher-Marstel propose to construct a port and storage facility for bulk liquid chemicals and petroleum products on approximately 36 hectares at Point Lillias on the Geelong arm of Port Phillip Bay.

The EES describes the proposed development and addresses environmental, social and economic issues arising from the project. Concurrently on exhibition with the EES is amendment R148 to the Greater Geelong Planning Scheme, which proposes the introduction of a Point Lillias Special Industrial Zone to provide for the project and an EPA works approval application NO. WA28278.

All three documents will be exhibited until 28 March 1996, at the following locations:

City of Greater Geelong Customer Service Centres in Geelong, Geelong West, Belmont, Corio, Ocean Grove and Drysdale.

Department of Planning and Development Offices in Geelong and Melbourne.

Environmental Protection Authority offices in Geelong.

Environment Organisations: Environment Victoria, North Melbourne, Australian Conservation Foundation, Fitzroy and Geelong Environment Council Resource Centre, Pardey's Pharmacy, 124 Moorabool St., Geelong.

Libraries: Deakin University, Geelong, Geelong City Library, Belmont Library, Ocean Grove Library, Drysdale Library, Corio Library, State Library of Victoria, Footscray Library, Heaths Road Library, Werribee and Woden Town Centre Library, ACT.

Point Lillias Project Information Nights and Open Day

Details available from Project Unit office (03) 9655 6655 or Freecall 1800 814 277.

An EES summary brochure is available from City of greater Geelong Customer Service Centres and libraries, or by phoning Point Lillias Project Unit (no. above). The EES may be purchased from the Project Unit at \$50 for the three core documents, appendices for \$15 each. The full EPA works approval application, a summary, accompanying plans, specifications and other information may be viewed free of charge at the above locations or purchased from EPA Geelong for \$8.

Submissions are invited from the public and

interested parties on all exhibited documents until 28th March, 1996. Any submission lodged will be considered as a submission on both the EES and Amendment R148 to the Greater Geelong Planning Scheme and will be treated as a public document. Copies will also be provided to the Proponent and the EPA. Following the public exhibition and receipt of submissions it is anticipated that an independent inquiry will be convened at which persons may be heard in respect of their submissions. Persons writing submissions should state whether or not they wish to be heard at the inquiry hearings. Following any such inquiry the Minister for Planning will provide an assessment of the environmental effects to decision makers. Submissions should be forwarded by 28th March to:

Mr. Adrian Williams
Planning Division, Office of Planning and Heritage
Dept. of Planning and Development
GPO Box 2240T Melbourne 3001

White-bellied Sea-Eagle Under Threat

The future of the SEC land on French Island where the White-bellied Sea Eagle breeds is to be decided in the very near future.

The Land Conservation Council in their final report recommended that this land be added to the park. The Friends Group have written three letters to the Minister, Mr. Mark Birrell, since August 1995, trying to find out what the Government intends to do with this land but he has not answered us.

My concerns are that this land will be sold with no consideration to the needs of the Sea-Eagle. It is imperative that the Government know that there is interest in what happens to this land and to the Sea-Eagle. I ask you to write immediately to Mr. Birrell expressing your concerns.

Please write to:
Hon. Mark Birrell
Minister of Conservation
240 Victoria Parade
East Melbourne VIC 3002

If you want any further information please contact me (Fay Gordes) on (03) 9772 9668 or (059) 801254.

Grassland Sites in Hobsons Bay Threatened

with Development

It has come to the attention of the IFFA committee that two important grassland sites in the former city of Altona are under imminent threat of subdivision and/or development without a Flora and Fauna Assessment.

The two sites, as named in the Remnant Native Grasslands and Grassy Woodlands of the Melbourne Area "Action Plan"? (DCE 1990), are the Galvin Grassland on Maidstone St. in Altona (Melway 54 D8) and the Slough Estate Grassland off of Burns Rd. in Altona (Melway 53 J6) next to the petrochemical complex and Truganina Swamp. Galvin Grassland is a 25 ha site considered to be of local significance but almost no survey work has been undertaken on the site. The Slough Estate Grassland is a large relatively intact remnant of over 250 ha with many rare grassland herb species, including *Minuria leptophylla*, *Ptilotus macrocephalus*, possibly *Comesperma polygaloides* and most importantly an undescribed *Diuris* species known only from that site. The Slough Estate Grassland would also be great extension to the already existing park that includes Truganina Swamp to the southeast; it is one of the few remaining examples of a transition from grassland to saline communities including saltmarsh.

These sites need some defending. Please raise your objections to the possible destruction of these sites that contain one of the rarest vegetation communities in Victoria, already listed under the Flora and Fauna Guarantee Act. Please write to the Minister for Conservation to express your concern:

Mr. Mark Birrell
Minister for Conservation
Department of Conservation and Natural Resources
8th Floor, 240 Victoria Parade
East Melbourne 3002

And while you're at it send a copy of it to the Conservation Officer at the City of Hobsons Bay, Andrew Shannon and possibly the Opposition.

Books:

Wildlife of Greater Brisbane

[Published by the Queensland Museum]
Another great little book on urban wildlife from Queensland. Available for viewing at meetings of the Toohey Forest Protection Society, the first Monday of each month at Holland Park High School, Brisbane or for sale at Sandy's Bookstore at Mt. Gravatt Plaza.

Source: Toohey Forest Protection Society Newsletter, January 1996.

Fern Books in Print

By Ivan Traverso

This is an amazing list of references for travellers interested in ferns. It is a comprehensive list of books on ferns in many regions around the world. It is presented in several parts in the Fern Society of Victoria's Newsletter, in November/December 1995 issue, January/February 1996 and to be continued. To subscribe, \$15 single and \$18 family, write to P.O. Box 45, Heidelberg West VIC 3081.

Creek Life - Flora and Fauna of the Merri Creek Valley

This superb book provides a beautiful guide for naturalists, teachers, children - in fact, just about everyone. The text by Brett Marshall and Brian Bainbridge is clear, concise and easy to read, and Brian Bainbridge's illustrations are absolutely delightful. Not only do they clearly depict the feeling of the different landscapes along the Merri, but every animal and plant is drawn with fine technical accuracy. What's also notable is that this book has been produced as a Jobskills project for the long-term unemployed.

Copies are available for \$15 from the Merri Creek Management Committee, 2 Lee St., Brunswick VIC 3057, Ph. (03) 9380 8199.

Source: Grass Clippings, Newsletter of the Grassy Ecosystem Reference Group, December 1995

Roadside Geology: Melbourne to Ballarat

This book is "a drive of discovery; a trip through time; an explanation of landscape and underlying geological structure". This joint publication of the Geological Society of Australia (Victorian Division) and the Field Naturalists Club of Victoria is edited by an active member of both organisations. It is a comprehensive exploration of the geology between Melbourne and Ballarat. It begins with a general geological introduction to the region and then focusses on many sites along the route where the geological formations are found and exposed. All of these stops are described in words, figures and photographs. It ends with a comprehensive glossary of important terms and other important references. It is essentially the essential reference tool for a self-guided tour of the geology of small, but well-visited, area of Victoria. It is available for \$15 until May 1 from the Field Naturalists Club; the best way to buy will be go along to a meeting at their hall in the next couple months.

Lincoln Kern

From Roadside Geology

Membership / Renewal / Change of Address Form

I wish to become a member of IFFA>
(Costs \$40 for non-profit organizations, \$50
for corporations, \$25 for individuals
and families, or \$20 concession.)
Membership includes Indigenotes.

\$ _____

I wish to renew my membership

Please change my address details to those below

I wish to make a donation of

\$ _____

I enclose a cheque for the total of

\$ _____

Name: _____

Ad-
dress: _____

Suburb or City: _____ Postcode: _____

Phone: (home) _____ Phone: (work) _____

Return to:
Indigenous Flora and Fauna Association
Membership Secretary
P.O. Box 328
Clifton Hill 3068.

IFFA activities:

IFFA (Vic)

New Meeting venue:

We will be switching our meeting venue to the Astronomer's Residence Conference Room at the Botanic Gardens (Melway 44 A12) for February to June this year. Please note the change and tell any committee member what you think about our choice of venue for the future.

Next meeting:

Tuesday, 27 February 7:30 pm at the Astronomer's Residence. Lincoln Kern [and possibly others] will speak about "The Flora and Fauna of the Gelantipy Plateau, East Gippsland" having recently returned from a month's sojourn there in January.

Everyone welcome!

Committee meeting:

The Committee meeting is now the second Monday of every month. Contact any committee member for the location.

Southern Peninsula IFFA

Meetings and Venue:

At 7:30 pm on the first Monday of each month at Waterfall Gully Community Centre Bayview Rd. and Nixon Ave., Rosebud. Contact the Secretary on (059) 868347 for details.

Membership

IFFA membership costs
\$40 for non-profit organizations,
\$50 for corporations,
\$25 for individuals and families,
or \$20 concession.

Membership includes
11 issues of *Indigenotes* per year.
*Memberships should be sent to the
Membership Secretary at
P.O. Box 328, Clifton Hill 3068.
Include your name,
address and phone numbers,
and a bit about yourself.*

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Coming Events: Elissa Kerassitis (03) 9379 1116 (ah).

Contributions to *Indigenotes* should be sent to the editors — the deadline for the next issue will be March 9th. Contributions can be typed or hand written but computer disk copies on IBM-compatible format are preferred.

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