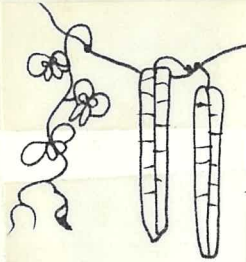
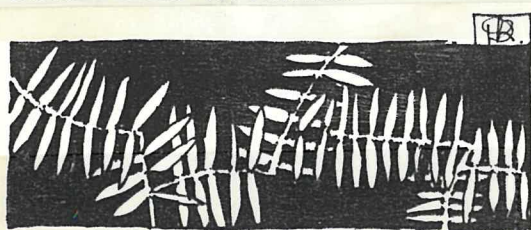


## Bush Regen Group Work Days

We have compiled a list of the regular workdays of most of the local volunteer bush regenerating groups. Please inform us of any changes or additions:



- ♦ **Browns Bay , Church Point** - every 2nd Saturday.  
Contact Jill Madden, 9997 3975.
- ♦ **Bungan Beach** - 1st Sunday of month.  
Contact Richard Rowe, 9979 5179.
- ♦ **Catalpa Reserve, Avalon** - to be advised.  
Contact Sue Horner, 918 3372.
- ♦ **Crown of Newport Reserve** - occasional.  
Contact Elisabeth Capel, 9997 5073.
- ♦ **Epworth Park, Elanora** - 1st Sunday of month.  
Contact Sally Fisher, 970 6486.
- ♦ **Ingleside Park** - occasional.  
Contact Sally Fisher, 9706486.
- ♦ **Kundibah Reserve, Elanora** - 1st Sunday of month.  
Contact Gary Harris, 918 0430.
- ♦ **Mackay Reserve, Avalon** - various Sats and Suns.  
Contact Warren Jack, 878 3260.
- ♦ **Palmgrove Park, Avalon** - 2nd Sunday of month.  
Contact Marita Macrae, 918 3368.
- ♦ **Porter Reserve, Newport** - 2nd Sunday of month.  
Contact Bill Hudson, 9979 7877.
- ♦ **Scotland Island** - to be advised.



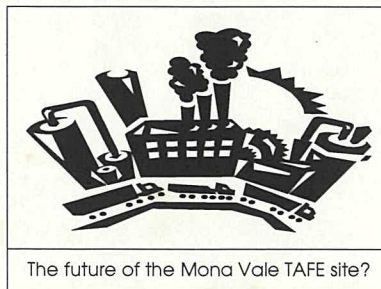
## Mona Vale TAFE site update

Last year this small but valuable piece of bushland received publicity in the local press when some unusual plants were discovered at the site, and Pittwater Council rejected a development application for 84 townhouses to be built. Recognition of the damage likely to result in the bush area was a major reason for the knock back.

However the NSW Government's Department of Planning (owner of the land), has now taken control out of the hands of the Council. DOP's draft Development Control Plan recently circulated, failed to recognise that any bushland existed on the site. Half of the bushland area was still zoned for medium density housing. Trees in this area "are to be preserved where possible".

PNHA's submission reminded the DOP that The National Trust bush regeneration branch, the NPWS, the Total Environment Centre, and Council's environment officer Diane Campbell, all regarded this area of bushland to be of high conservation significance. We urged DOP to designate the whole site as public open space, with the bushland area to be managed as required under SEPP 19 and the rest to be left as public open space to cater for the recreational needs of the area.

***We can't help thinking that the DOP should be called DOMP - Department of Maximum Profit or Department of Minimum Planning!***



The future of the Mona Vale TAFE site?



OCTOBER 1994

***Welcome to the first edition of the Pittwater Natural Heritage Association Inc Newsletter.***

*Firstly, we would like to extend our warmest thanks to you for supporting us by becoming a member of the Association.*

*With a combination of the expertise and enthusiasm of all our members, and all the great information that the Association will be providing on a regular basis, we are on our way to ensure the healthy future of the natural heritage of Pittwater.*

*Our regular newsletter, along with local newspaper articles, organised walks and field days, etc, will provide you with information, advice and hands-on experience. The Association aims to further educate the people of Pittwater about our unique and very special environment, and help develop their appreciation of its enormous value.*

*Each issue of the Newsletter will feature articles such as native plant profiles, calendar of events, our threatened species, bush regenerating groups and seasonal topics.*

*Enjoy reading your Pittwater Natural Heritage Newsletter! It's great to have you on board.*

**Pittwater Natural Heritage Association Inc.  
24 Catalina Crescent, Avalon Beach NSW 2107**

## Rock Platforms/Intertidal Zone



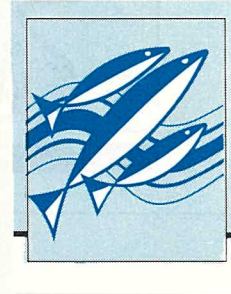
The margin of the sea between high and low water is the intertidal zone. It can include rocky headlands, beaches, sand or mud flats, mangrove forests or seagrass beds. The intertidal zone is home to a curious group of plants and animals. The great variation in environmental conditions generated by the rise and fall of the sea, the mood of the sea, and the various habitats, has led to the evolution of a highly diverse community of animals. So abundant are they, and so easily seen, that they make the seashore an endless source of fascination for biologists, naturalists, fishers and beach lovers.

The intertidal zone contains hundreds of different species of weird, colourful and beautiful animals. The most obvious are the populations of crabs, snails, worms, cunjevoi, octopus, sea urchins, anemones, pipies, cockles and nippers. Many of these animals are unique to Australia. Intertidal animals are wholly dependent on the sea for their means of survival. They receive oxygen and food while emersed, and all must release eggs and larvae into the water as part of their reproductive strategy. Most intertidal animals are active at night foraging and moving about during high tide. Little activity occurs during the low tide as animals shut up shop to prevent dessication.

There are considerable interactions among populations of intertidal animals. Interactions may be for space, food or predation. Sea urchins are voracious grazers and are important determinants of the amounts, variety and distribution of seaweeds. Cunjevoi are important for providing habitat for many smaller animals and as a source of food. Many intertidal animals have seasonal movements from

deep to shall water as part of their breeding cycle. The life histories of most intertidal animals include a stage of development in the plankton floating around in coastal waters. The full range of feeding guilds (carnivore, herbivore and omnivore) are found among intertidal animals.

Australia's shallow coastal habitats are a major area for human recreation. The intertidal zone is visited by thousands of people every week as they go fishing, snorkelling, swimming, diving, collecting for food or aquaria, or just walking around. These activities have led to the collection or removal of many kinds of organisms, from large edible fish to small fish collected for aquaria; from green seaweeds to the cunjevoi which are used for bait for different types of fish. The foraging activities of some groups have become controversial. The potential for disturbance to intertidal assemblages from such current recreation is large.



In an attempt to regulate the harvesting of intertidal animals, bag limits on many animals were introduced in 1988. While bag limits appeared to have some success, an additional management arrangement recently introduced is the complete protection of

### **Pittwater Natural Heritage Association Inc. 24 Catalina Crescent, Avalon Beach, 2107**

*Committee Members:*  
*Sue Horner - Chairperson*  
*Marita Macrae - Secretary*  
*Sally Fisher - Vice Chair*  
*Dale Kentwell - Treasurer*  
*Elisabeth Capel - Publicity*

intertidal animals in some areas. These Intertidal Protected Areas (IPAs) have been chosen to preserve the structure of the intertidal community and to act as a reservoir to repopulate harvested areas. Practically the entire Sydney Harbour is an IPA and about 13 regions along the Sydney coast are protected. It is expected that areas on the NSW north, central and south coast will be nominated in future.

*This information was provided by Gary Henry, Principal Fisheries Manager (Recreational), NSW Fisheries. For more information contact NSW Fisheries, on 566 7800.*

### *Be aware of those ticks!*

*Lyme disease, a chronic infectious illness spread by ticks, has recently been described on the Northern Beaches of Sydney. Early symptoms may include a rash and flu-like illness followed by chronic fatigue, neurological, joint, cardiac and many other symptoms, lasting from months to years and which may be resistant to treatment.*

*The small nymph stage and the much larger adult Ixodes tick (the common grass tick) are responsible for most cases. The tiny and very common larval stage is not thought to be infectious. Removing ticks as soon as they are discovered is essential to avoid infection as at least 24 hours are required for transmission. If a spreading rash and/or a flu-like illness follows a tick bite, medical attention should be sought as Lyme disease is potentially curable at this early stage with appropriate antibiotic treatment. However, the best preventative measure is to remove the tick as early as possible.*

*For further information contact Tick Alert Group Support (TAGS), P.O. Box 1551,*

## Natural Heritage - What Is It?



Natural heritage is all elements of the natural environment we live in - and also ecological processes. The variety of landforms, rock formations, topography, and expanses of ocean, estuary, lagoon and wetlands make our Pittwater natural environment exceptionally rich in variety of vegetation communities and fauna habitat.

So, in relation to native vegetation, we're not simply concerned with trees, but with plant communities of different types and their function as habitat for all sorts of fauna - from soil micro-organisms to insects, birds, marsupials and reptiles.

On the ocean and estuary shores, the variety of environments provided by rock platforms, sandy beaches, mudflats and saltmarshes each support complex communities of flora and fauna.

We should value and respect our natural heritage for its beauty and endless variety, and for the intrinsic worth of species other than our own. Since the dawn of agriculture people have sought to change or substitute local flora for their own advantage, for food production and then for aesthetic appeal of exotic plants.

Let's recognise the value of our Pittwater natural heritage as it is. We can live in harmony with it and seek solutions to threats, rather than mindlessly changing and destroying it.

## Pittwater Natural Heritage Association Aims

Pittwater Natural Heritage Association aims to:

- raise public awareness of the conservation value of the components which together make up the natural heritage of the Pittwater area: its landforms, watercourses, soils and indigenous vegetation and fauna.
- raise public awareness of the threats to the long-term sustainability of Pittwater's natural heritage.
- foster individual and community responsibility for caring for this natural heritage.
- encourage Pittwater Council and the NSW Government to adopt and implement policies and works which will conserve, sustain and enhance the natural heritage of Pittwater.

### Calendar of Events

- ♦ **Saturday Oct 22** - Careel Bay Walk. Mangrove and saltmarsh vegetation and wildlife. Meet at end of Etival Street at 2. End 4pm.
- ♦ **Saturday Nov 12** - Irrawong Reserve and Mullet Creek. Bush regeneration after January bushfires. Meet at end of Irrawong Road, off Garden Street, Warriewood at 2pm. End 4pm. Hands-on weeding. BYO knife if you want!
- ♦ **Wednesday Nov 16** - First General Meeting of Pittwater Natural Heritage Association. Mona Vale Community Centre, Old Pittwater Road, Mona Vale, at 7pm.
- ♦ **Sunday Nov 20** - Bird Watch Walk. Deep Creek, Wakehurst Parkway, Narrabeen Lake. Meet at dog exercise area 9am. End around 11am.
- ♦ **Saturday Nov 26** - Browns Bay Bush Walk. Regenerating gully with rainforest vegetation. Meet at Browns Bay, Church Point at 2 pm. End 4pm.
- ♦ **Saturday December 10** - Our very first P.N.H.A. Christmas Party! McCarrs Creek Reserve, McCarrs Creek Road, Church Point. From 4pm onwards. B.Y.O. everything.

*Please RSVP to any of the above events by phoning Marita Macrae on 918 3368.*

## Bush Regen Site Profile

Browns Bay, McCarrs Creek Road,  
Church Point.



*Browns Bay is a 2ha pocket of remnant dry and wet rainforest running into the eastern shore of McCarrs Creek. It consists of part road reserve and part drainage easement.*

*5 years ago the site was a weed vine thicket of morning glory and lantana. Volunteers are restoring the slopes to original dry rainforest - consisting of Grey Myrtle, Turpentine, Ironbark, Grey Gum and Forest Oak canopy with a wide selection of understorey plants.*

*In the gullies the main plants are Lillypilly, Coachwood, Cabbage Tree Palms, Ferns, with many uncommon species present. Wildlife includes sightings of lace monitors, water dragons, diamond pythons, a lyre bird, long-nose bandicoots, and a list of birds 'as long as your arm'!*

*Volunteers work on alternate Saturday mornings. For further information, please phone Jill Madden, on 9997 3975.*

**Don't forget that the first General Meeting of P.N.H.A. Inc is being held on Wednesday, November 16, at 7pm, at the Mona Vale Community Centre, Mona Vale. We invite you to come along and share your opinions and comments, to meet the other members, and enjoy some light refreshments as well! Look forward to seeing you there!**

## Wildlife Corridors

The word 'corridor' somehow suggests that wildlife will move along a passage - perhaps a narrow one in single file.

To zoologists a wildlife corridor can be any piece of land connecting major areas of habitat. When a corridor is to function for only a short period of time and much is known about the behaviour of the individual animals expected to use it, it can be as narrow as 1-10 metres wide. When many species are to use a corridor and it is expected to last for decades, then it should be kilometres wide.

Movement in some form is necessary for all animals, and even plants move during their reproductive and dispersal stages. Animals will move for a variety of reasons, including foraging for food, water and shelter; exploiting seasonal or sporadic resources; returning to their birth place; colonising new areas; accommodating short and long-term climate changes and changing preference during different seasons and life stages of insects and other animals. Corridors help flora and fauna avoid the problems of interbreeding.

Corridor vegetation should be complex in structure, meaning there will be various types and sizes of plants, from ground covers to trees, providing fauna with sites for feeding, resting, nesting and protection from predators.

Pittwater Council's environment officer, Diane Campbell, and fauna consultant, Paul Burcher, have identified various fauna corridors, most of which

now pass through areas of urban development or small parks with remnant trees.

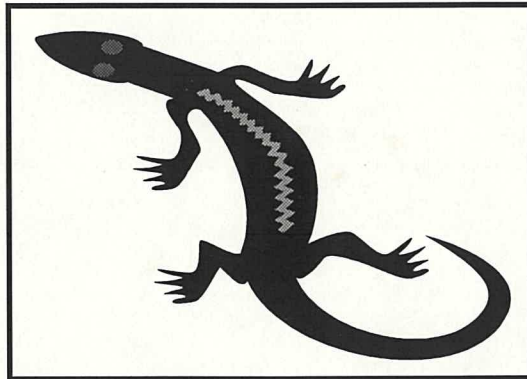
Catalpa Reserve in Avalon, until July this year consisted of remnant Swamp Mahoganies, other large trees, and mown grass. As does Toongarie Reserve west of Pittwater Palms retirement village, it lies in a corridor between Stapleton and Angophora Reserves. To reintroduce the complex plant community which would formerly have been on this site, areas of grass were treated with herbicide and

about 700 trees, shrubs, ground covers and grasses were planted among the existing mature trees.

A small bush regeneration program has just been completed at Toongarie Reserve. Replanting in other areas of this reserve, as for Catalpa, is planned for later in the year, and it's hoped local residents can be encouraged to form

volunteer groups to continue the regeneration and maintenance work.

Swamp Mahoganies may not be an aesthetically appealing tree, but they are particularly valuable to koalas and as a source of scarce winter food for honey eaters and gliders. They also offer possums, gliders and birds hollows for nesting sites.



## Irrawong Grant

*The fine efforts of Ms. Polly Thompson and Ms. Diane Campbell from Pittwater Council's Environment Division were rewarded recently by the success of an Environmental Trust grant application which they compiled.*

*The grant was for the restoration and regeneration of Irrawong Reserve and totalled, including Council's contributions, nearly \$194,000.*

*The reserve which forms the upper reaches of the Warriewood wetlands, along Mullet Creek, is home to the regionally rare Syzigium Paniculatum and is the last significant stand of Eucalyptus Robusta in the Sydney region.*

*The swampland is home to an astounding number of bird and reptile species and is also koala habitat. The grant will finance the construction of sediment control structures, boardwalks and the regeneration of the bushland.*

*Council is soon to produce its own plan of management for the reserve. A field day is also being planned as part of public education.*

*This grant adds extra weight to the environmental constraints required if the Ingleside/Warriewood land release is to proceed.*

*Thanks again Polly and Diane!!*

**If you have any snippets of news or items that you think would be of interest to our readers, we would be very interested to hear from you. Please send any correspondence to PNHA, 24 Catalina Crescent, Avalon Beach, 2107.**