

# 6<sup>TH</sup> CREEK CATCHMENT GROUP

## Newsletter

Winter 2005

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### Winter seminars

Want to learn more about **Native Fish** in our waterways?  
Or maybe you would like to explore the world of **Organic Farming**?  
FREE seminars & courses are being run at AHNRC at Norton Summit throughout winter.  
Ph (08) 8390 1891



## NEWS FROM THE PROJECT

***We have been extremely busy over the last 8 months, with over \$100,000 spent on weed control on private & public land in the catchment.***

Approximately 40 properties have benefited from SCCG funding over the last 9 months, and as we head into winter, funds will be used for activities such as: slashing access tracks, fencing, revegetation & watercourse rehabilitation.

During Jan-April, we were fortunate to have a Youth Conservation Corps team help us with hand pulling and cut & swab work at Deep Creek Bridge and also on selected private properties. The team also helped out with water monitoring.

SCCG are now regular water monitors with 4 sites selected in the catchment, which will be monitored six times throughout the year. Take a look at our data inside the newsletter.

Due to funding constraints, we are now teaming up with the Adelaide Hills Natural Resource Centre to run a 7 week Land Management Course in Aug-Sept.

All new property owners are encouraged to participate, and anyone else who would like to refresh their skills is more than welcome to come along!



## COMING EVENTS

- July** 27th – FREE seminar on **Native Fish** with Michael Hammer AHNRC @ 7.30pm  
31st – **National Tree Day**
- August** 3rd – **Snapshots #4 Waterwatch**  
3rd – FREE seminar on **Organic Farming** with Tim Marshall & Brad Nott, AHNRC @ 7.30pm  
16th - 7 week **Land Management Course** begins AHNRC 7.30-9.30pm (registration essential)
- September** 4th - **Catchment Clean Up** AHNRC at 9.30am-12pm. Bring along gloves, hat, sunscreen & sturdy boots. Volunteers will be provided with reflective jackets, rubbish bags, gloves, and lunch at AHNRC at 12.30pm ph (08) 8390 1891  
14th – **Snapshots #5 Waterwatch**

For more information, check out our website at [www.sixthcreek.com](http://www.sixthcreek.com)



# Native fish in Sixth Creek - *What to look for and how to help*

Michael Hammer – Native Fish Australia (SA) *Scientific Officer*

Sixth Creek is a major tributary to the River Torrens and flows through a largely rural catchment area within the western Mount Lofty Ranges. It is unique in having large sections of permanent flow of low salinity water, one of only a handful of systems with these qualities in South Australia. The Sixth Creek Catchment is thus a natural refuge and prime habitat for aquatic creatures.

## Native fish

Hidden beneath the waters surface, native fish often go unnoticed, and many people would be surprised to learn of the diversity and variation in the species that occur in their local area. Native species of the Adelaide Hills are all fairly small (<30cm), with this size a natural response to the small and variable nature of regional waterways. Australian fish like many other native animal groups like mammals and birds show a variety of unique forms and are an important part of aquatic biodiversity. They are also a part of local ecosystems by being food for other native animals and predating on mosquito larva.

At least five different native fish were thought to occur in Sixth Creek prior to European settlement. A recent NFA(SA) survey funded by the Torrens Catchment Board found only one of these remains, the Mountain galaxias (see photo). The others include Climbing galaxias (see next page), river blackfish, shorthead lamprey and pouched lamprey.

Common galaxias and flathead gudgeon are two additional native species that still occur at the junction of Sixth Creek and the Torrens.



Mountain galaxia , NFA(SA)

## What to look for

Native fish can be observed in their natural habitat by sitting quietly next to the stream provided the water is clear enough. They are most active towards dusk to avoid predators and can also be easily observed at night under torch light. For positive ID they can be collected in bait traps and with dip nets available from normal fishing stores. Use a small jar or plastic aquarium to observe them briefly before release, and avoid touching them with dry hands. A guide produced by the Upper Torrens Landcare Group is available to help with ID (see references), and you can get identifications confirmed by sending a picture to Native Fish Australia:

Email pictures, preferably of the side of the fish to: [research@nativefishsa.asn.au](mailto:research@nativefishsa.asn.au) or mail to NFA(SA) c/o 120 Wakefield St Adelaide SA 5000

## Threats

There are several threats to native fish in the Sixth Creek Catchment. Habitat changes through the loss of permanent flows (via farm dam abstraction, and pumping directly from the stream and groundwater), loss of riparian cover (e.g. stock access) and increased silt loads from practices on the land within the catchment are past and ongoing threats.

The presence of introduced predatory fish like trout and redfin is also a serious threat to native fish as they grow many times larger than native species, displacing them from habitat or whole stream reaches. This is seen in Sixth Creek where native fish can no longer be found in ideal habitat in the mid-lower catchment and some tributaries due to high numbers of introduced trout (mainly brown trout with the odd rainbow trout, brook trout have also been stocked historically).

## Restoration

Native fish are ideal indicators of stream health due to their reliance on many underwater conditions for survival. Hence they stand to benefit from properly planned and considered restoration projects to improve habitat conditions such as:

- the installation of low flow by-passes on existing dams (or better still take unused dams off-line) and other environmental flow initiatives
- stream side fencing and revegetation - especially important to provide cover during floods and shading during summer
- general erosion control – identify particular sources of silt entering waterways
- exotic fish control and education

Monitoring the presence and abundance of fish is an important part of restoration projects.

## More information

*Hammer, M., and G. Butler. 2000. Data sheet: freshwater fishes of the Mount Lofty Ranges, part A, South Australian Gulf Division. Upper River Torrens Landcare Group Inc, Mount Pleasant, South Australia.*

*Hammer, M., and G. Butler. 2001. Data sheet: freshwater fishes of the Mount Lofty Ranges, Part C, Exotic Fish. Mount Pleasant, South Australia. Upper River Torrens Landcare Group Inc, Mount Pleasant, South Australia.*



Climbing galaxia, NFA(SA)

\*These data sheets are available from the Adelaide Hills Natural Resource Centre at Norton Summit.

## Useful websites

Native Fish Association SA [www.nativefishsa.asn.au](http://www.nativefishsa.asn.au)

SA Catchment Water Management Boards [www.catchments.net](http://www.catchments.net)

Upper Torrens Landcare Group [www.torrenslandcare.org.au](http://www.torrenslandcare.org.au)

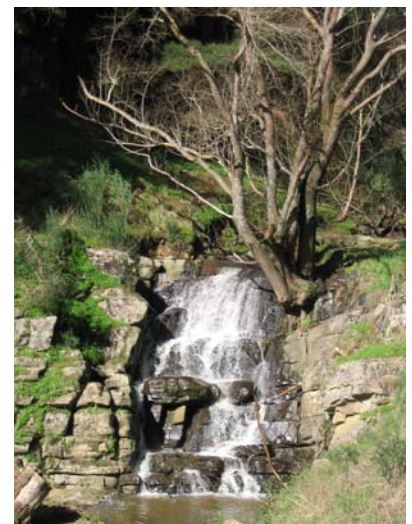
Want to learn more?  
Come and hear  
Michael speak at the  
AHNRC on 27<sup>th</sup> July.

## Water facts

With a high level of macro-invertebrate species abundance and species diversity/richness, Sixth Creek is a relatively healthy creek in terms of aquatic ecosystem health.

The distinctly clear water found throughout the catchment is in marked contrast to the turbid flows in the main channel of the Torrens. The bulk of nutrients are carried attached to soil particles derived from erosion of the stream/river bed and banks in high flows, rather than in runoff from agricultural practices.

Results from our monitoring through the KESAB Patawalonga & Torrens Waterwatch Snapshots program have confirmed that Sixth Creek has excellent water quality compared with 3<sup>rd</sup>, 4<sup>th</sup> & 5<sup>th</sup> Creeks, but our native fish are slowly disappearing. This is mainly due to the introduction of trout into our waterways, which is displacing native fish species.



Hunters Falls at Basket Range

## Land Management Course

The Land Management Program run educational courses over a 7 week period, covering topics such as wildlife conservation, pest control (animal & plant), native plant identification & bushland management, watercourse rehabilitation, property planning etc...

All sessions are held at the Adelaide Hills Natural Resource Centre, 1 Crescent Drive, Norton Summit, 7.30pm-9.30pm with tea, coffee and nibbles provided.

Courses start **Tuesday 16<sup>th</sup> August** and cost \$120 per property.

**Contact Pam Brookman on (08) 8391 7500.**

## Local plants available

The Basket Range Landcare Group have been busy over summer collecting native seed from around the catchment and propagating plants for the group to use for revegetation on properties.

We have a range of local native plants to choose from such as:

*Eucalyptus*  
*Acacia* (pictured)  
*Hakea*  
*Pultanaea*  
*Kennedia* etc...



**Contact the Project Officer for further information or drop by the Centre to see what's available.**

The 6<sup>th</sup> Creek Catchment Group is supported by:



Patawalonga & Torrens Catchment Water Management Boards



Natural Heritage Trust  
Helping Communities Helping Australia



ForestrySA



Mount Lofty Ranges Catchment Program



ADELAIDE HILLS COUNCIL



MT LOFTY RANGES ANIMAL AND PLANT CONTROL BOARD

Department for Environment and Heritage



Adelaide Hills Natural Resource Centre Inc

## Winter jobs to do...

- ✓ Attend a Land Management Course to develop a better understanding of your property and receive technical help with the preparation of a property plan.
- ✓ Prepare any sites for revegetation projects (Basket Range Landcare Group have raised over 400 seedlings for us to use, ensuring we are using local provenance)
- ✓ Now is the ideal time to hand pull woody weeds while the soil is soft, it's also a good time to slash access tracks through thickets of woody weeds to enable easy access for spraying in the warmer months
- ✓ Hire a Tree Popper from the AHNRC to remove woody weeds and help save your back!

The Sixth Creek Catchment Group is a Landcare organisation with private and public landholder membership. The Group's objectives are the protection and rehabilitation of the catchment's natural resources.