



Welcome to the Autumn edition of the Gecko, and greetings to all Bushcare, Landcare, Swampcare and Streamwatch volunteers. As the new Bushcare Coordinator, this is my first Gecko. I am looking forward to meeting those I haven't as yet met, and as an introduction there is an article in this edition.

This edition has information on some past and coming events which I hope will interest you. I would like to encourage you to consider attending one of the next Bushcare Network meetings on Wednesday 28th May and/or 27th August. They are held at 6pm on a Wednesday, after sunset so no weeding will be missed, and you will be given a light dinner. These meetings offer volunteers an opportunity to raise issues which go beyond the resources of any one Bushcare group to deal with. They provide a forum for discussion and an opportunity to make suggestions about any aspect of the Bushcare program. Four meetings are scheduled each year, and held at the Mid Mountains Community Centre, Lawson. If you are interested and unable to attend at this time or venue, please let me know .

One current question to be discussed at this meeting and in groups is what workshops or 'training' opportunities that volunteers would like to be offered over the next year.

I wish to thank Nathan for his contribution in coordinating the program over the last 6 months and everyone's assistance in teaching me the ropes.



Lyndal Sullivan
Bushcare Team Leader

DATES TO NOTE

May 15 – June 19 - Greening the Silver City Exhibition at Mt Tomah Botanic Gardens
See article for details

Wed 28 May - Bushcare Network Meeting 6pm at Mid Mountains Community Centre, Lawson. Light dinner provided. Please notify for catering Lyndal Sullivan 47805 528 or lsullivan@bmcc.nsw.gov.au

Saturday June 7 - World Environment Day community activities at Springwood and Blackheath Contact Jasmine Payget 47805739

Sunday June 29 - Remote Bushcare along Long Angle Gully Creek. See article.

Monday July 21 - Deadline for contributions for next edition of Gecko Articles about issues or events are welcome from all Bushcare, Landcare, Swampcare and Streamwatch Group members.

Sunday July 27 2008 - National Tree Day Local planting sites will be advertised in the Gazette in July and on Council's website.

Saturday August 23, 2.30pm - Open Day at Pitt Park Wentworth Falls See article for details.

Wed 27 August - Bushcare Network Meeting 6pm at Mid Mountains Community Centre, Lawson Light dinner provided. Please notify for catering - Lyndal Sullivan 47805 528 or lsullivan@bmcc.nsw.gov.au

Saturday August 30 - Remote Bushcare in the Upper Mountains. Register your interest and discuss possible locations by contacting Lyndal Sullivan 47805 528 or lsullivan@bmcc.nsw.gov.au



Autumn Biodiversity Workshops

The Autumn season has unlocked more insights into our local Bushcare Reserves with the Biodiversity Workshop series.

On Saturday 15th March, 22 people, gathered at Sun Valley to observe the night fauna occupying the endangered Cabbage Gum Forests (*Eucalyptus amplipholia*) & River Flat Forests (Bluegums – *Euc deanei*) of Valley Heights/ Fitzgerald Ck, and also the surrounding Greygum and Turpentine Forests. Most of those attending were local to Sun Valley. We were fortunate to have the skills of local ecologist, Graham Turner, to lead us on our way. This was a highly successful and informative evening where numerous fauna were sighted in these special forest communities. Some of the highlights included a Greater Glider sighting and Sugar Gliders heard in the Bluegums Forest of Valley Heights Creek. 11 Brushtail possums were sighted throughout the evening including 2 babies. Other sightings included an Owlet Nightjar (*Aegotheles cristatus*), a Water Dragon, Perrins Tree Frog (*Litoria peronii*), Common Tree Frog (*Litoria caerulea*), Swamp Wallaby and the Brown Striped Frog (*Limnodynastes peronii*).

Later in the month, we were treated to a bird walk in Darks Common, Lapstone. This was led by Dick Turner and Jill Dark (the reserve being named after the Dark family), who both offered the group a unique combination with their depth of experience in bird observation and natural history background. The walk went along the old construction track to Glenbrook Gorge and then to the East of the reserve. Numerous White Throated Honeyeaters were seen as well as Yellow Faced Honeyeaters, Gang Gang Cockatoos, and a Noisy Miner's nest with chicks.

A workshop on Seed Collection was held at the end of March at North Katoomba. This is the second seed



Darkes Common, Lapstone. Jill Dark & Dick Turner

workshop that has been held with the Biodiversity Program, and it proved to be as popular as the previous one. Alex Strahan, a local horticulturist, provided some highly interesting information on seed collection including the environmental concerns. This was followed in the afternoon by a practical session in seed collection in which seed was gathered for an ongoing restoration project in the old North Katoomba quarries. This included Eucalypt species (which were assisted by the feeding habits of local parrots!), Tea Trees, Banksias and other local species. There were many comments on the practical applications of this knowledge and a definite desire has been expressed to continue these acquired skills with seed collection sessions on local Bushcare projects.

The Bushcare program thanks the Sydney Catchment Authority for providing the \$8,500 Catchment Protection and Improvement Grant which has funded the Biodiversity workshop series for the last year. The grant assisted Bushcare to run 20 Biodiversity workshops. It also helped establish the Biodiversity Workshop equipment kit (Binoculars, spotlights, hand lenses and field guides) and the Biodiversity Workshop library of over 30 titles which can be borrowed from Blue Mountains libraries (Search for 'Bushcare' as a general keyword to see the whole collection on the libraries online catalogue). Bushcare would also like to thank the community presenters who donated their time and expertise to make the biodiversity workshop series such a success.

Nathan Summers



Greater Glider , photo by Sonja Stanvik

FUTURE WORKSHOPS

What would you like to learn about ? We are interested to hear what you want to learn that would enhance your Bushcare experience. Contact either your Bushcare Officer or Lyndal Sullivan on 4780 5528 or lsullivan@bmcc.nsw.gov.au.





"SAVE OUR SWAMPS" GRANT

Good news for 2008-2010! Bushcare's Swampcare initiative, which was developed to assist the Blue Mountains community's ongoing efforts to protect threatened Blue Mountains Swamps, will receive a boost over the next three years.

BMCC (in partnership with Lithgow City Council) has secured an Environmental Trust Grant of \$240K over three years to help continue work to protect and rehabilitate Blue Mountains Swamps. The project will cross both the Blue Mountains and Lithgow LGAs and will focus on Temperate Peat Swamps on Sandstone EEC, which include the Blue Mountains Swamps, Newnes Plateau Shrub Swamps and the Montane Peat Swamp Endangered Ecological Communities.

The project will raise awareness about the significance of these endangered ecological communities which are home for the endangered Blue Mountains Water Skink and the Giant Dragonfly, as well as the 8 other threatened flora and fauna species that reside in or are associated with upland swamps. The project will include a community awareness raising and capacity building program to increase the community's capacity to engage in the rehabilitation of upland swamp systems, a school education program, an incentive program to encourage swamp rehabilitation works on private property and a series of major swamp rehabilitation projects. The project will also provide ongoing support for the Swampcare, Swampwatch and Giant Dragonfly and Blue Mountains Water Skink Monitoring programs, as well as coordinating ongoing threatened species management and monitoring. For further information contact Michael Hensen on 47805471 or mhensen@bmcc.nsw.gov.au.



Swampcarers tackling Tutsan invading Kittyhawk Swamp, Wentworth Falls

RIVERSTYLES ASSESSMENT UNDERWAY

The River Styles framework provides a scientifically-based geomorphic assessment of river or stream character, behaviour, condition and recovery potential. The procedure allows effective prioritisation of management strategies for stream rehabilitation and conservation, by:

- identifying, interpreting and mapping different types of streams in a given area;
- assessing the geomorphic condition and geomorphic recovery potential of each reach;
- developing realistic target conditions for rehabilitation programs, framed within a catchment-based vision.

Council is currently trialling the River Styles approach on creeks across the Mountains, as well as continuing the macroinvertebrate survey program. For more information on River Styles see www.riverstyles.com or contact Amy St Lawrence on 47805553.

NEW STREAMWATCH COORDINATORS

Both Sydney Water and Sydney Catchment Authority have new Streamwatch Coordinators for the Blue Mountains area. Claire Evans has replaced Helena Machado as Sydney Water's coordinator of groups from Bullaburra to Lapstone; and Cathy Driscoll is coordinating Sydney Catchment Authority groups from Wentworth Falls to Mt Wilson during Caroline Dearson's maternity leave. Council continues to offer support to all Streamwatch groups in the Blue Mountains. Claire (SWC): 87526400; Cathy (SCA): 47200343; Amy (BMCC): 47805553



Above left: intact valley fill (sand) at Asgard Swamp, Mt Vic; above right: what was once intact valley fill on a Kedumba Creek tributary (Katoomba) has now incised to form a different style (due to urbanisation)



WEED PROFILE

Billardiera (Sollya) heterophylla (bluebell creeper) cross continental creep.

Bluebell Creeper is a well known ornamental that is included in the collections of "native" plant enthusiasts as well as other gardeners. It is a Western Australian native plant that has extended beyond its natural range to become a weed. Previously this species (*heterophylla*) was placed in the genus *Sollya*, the name under which it is still commonly sold by the horticultural industry (i.e.; *Sollya heterophylla*). Current understanding of the family Pittosporaceae indicates that it is so closely related to the members of the genus *Billardiera* that it is in fact one of them, hence *Billardiera heterophylla*. Despite the challenges to our botanical memory banks of name changes, the fact that this invader is now called a *Billardiera* reminds us of our well known native *Billardiera scandens* (apple berry) to which the invader bears an almost uncanny resemblance, except during the flowering period.

In general Bluebell Creeper is a more robust plant, scrambling like Apple Berry, though forming a small shrub about a metre round in lieu of support for its seeking branches. The leaves are variable (indicated by the species name (*hetero* = differing, *phylla* = leaves), though invariably larger than Apple Berry. Be wary though, if you are on richer soils such as Mount Wilson, the native Apple Berry also supports larger leaves than those found on the sandstone derived soils. Unless your Bluebell Creeper is planted you may want to wait until summer months to confirm its identity due to the characteristic blue petaled flowers which are shorter and less bell-shaped than the yellow to cream flowers of Apple Berry.

Having verified the identity as Bluebell Creeper, it is time to swoop, hand-pulling (especially after rain), cut/scrape and

paint ASAP to prevent fruiting. As with many invasive species the dispersal of this species is via birds and by the very sticky flesh catching on boots, etc.

The first record of this species invading NSW was from near the Mount Banks turnoff, Bell's Line of Road. Since then feral populations in the Blue Mountains have been located at Lawson, Boddington Hill, Wentworth Falls, Katoomba and Blackheath, and elsewhere in NSW there are populations on the Southern Tablelands and near Waterfall south of Sydney. All these *known* localities indicate that this species can establish well, and if action is not taken Bluebell Creeper may well become as well known an invasive species as it is already in Victoria, South Australia, Tasmania and in parts of Western Australia that are outside of its natural range.

Clive Barker



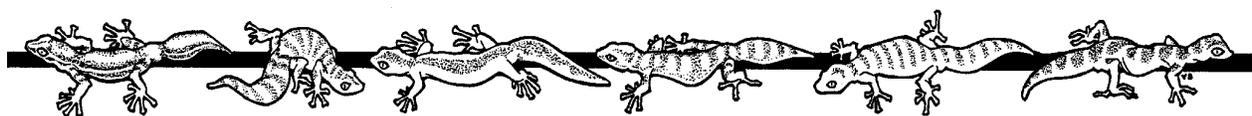
Bluebell creeper, courtesy Clive Heywood Barker

REMOTE BUSHCARE



Bushcare volunteers who like a good bushwalk, have participated in occasional remote Bushcare days over the last few years. These events have been mainly in two areas in the lower Blue Mountains – the upper reaches of Long Angle Creek, and Frasers Creek. As Winter is a good time to follow-up this work, there is a planned trip at the end of June, Sunday 29th .

There are also opportunities for remote Bushcare work in the upper mountains to be explored. These may be downstream of existing Bushcare sites or new areas altogether. It is planned to identify a few dates throughout the year on the 5th weekends of the month for remote Bushcare events. Saturday 30th August is reserved for another remote trip, possibly in the upper Blue Mountains, depending on the interest. If you are interested in being involved in either of these trips and have any ideas of where you'd like to weed and walk, please contact Lyndal Sullivan on 4780 5528 or lsullivan@bmcc.nsw.gov.au





Ruth Ley, Sue Morrison and Shirley Brown of the Brahma Kumaris Landcare Group collecting seeds near the creekline in April. Sue and Shirley had attended the Native Seed Collection workshop held in March as part of the Bushcare Biodiversity Workshop series, so they were on top of all techniques and procedures. The seeds will be propagated by Lithgow Community Nursery as part of a small CMA grant to this group, and the plants will replace the montbretia which is being removed from the creekbank.

BUSH FIRE RISK MANAGEMENT PLANNING

Where are the bush fire hazards in your area? Are there areas requiring hazard reduction? Are there environmental assets that require special protection from bush fire?

These are some of the questions being addressed in the Bush Fire Risk Management Plan (BFRMP). This plan is being developed by the Blue Mountains Bush Fire Management Committee.

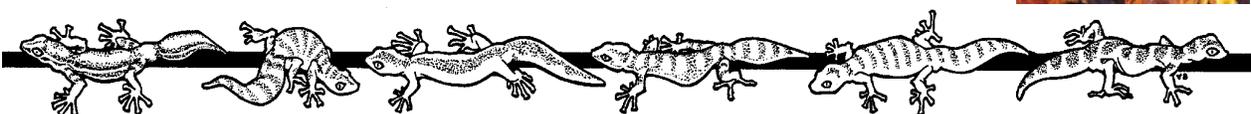
Already one series of workshops has been held during March and April to identify the social, economic, environmental and cultural assets across the local government area. Some groups were able to be notified in time to attend, but unfortunately not all.

There will be further opportunities to be involved in the second series of workshops expected to be held over the next few months. These will evaluate the risks and also alternative treatment strategies from hazard reduction (burning or slashing vegetation) to resident education on property protection.

Whilst Bushcare Officers are making sure that all Bushcare sites are identified as assets for this exercise, the active involvement of Groups in the consultation will be critical for the best outcome.

The Blue Mountains Bush Fire Management Committee (BFMC) consists of a range of stakeholders such as NSW Rural Fire Service, the NSW Fire Brigade, the Blue Mountains City Council, National Parks and Wildlife Service, Department of Lands, Deerubbin Local Aboriginal Land Council and the NSW Nature Conservation Council.

If any Bushcare Group or individual is interested in participating in the process, it is essential to contact Inspector Eric J Berry, NSW Rural Fire Service 4784 7416 or E-Mail eric.berry@rfs.nsw.gov.au to be included in the contact list for future notifications.



INTRODUCING LYNDA SULLIVAN

as the new Bushcare Team Leader

I've been an active Bushcare volunteer since the inception of the Minne-HaHa Falls Landcare Group, 17 years ago. This group was one of a handful that started before council provided active support and before the employment of Bushcare officers. Since then I have been assisted in the formation and coordination of the Katoomba Creek Bushcare Group.

For the last 12 years I have also been working professionally as a bush regenerator for two local contractors. This has given me the opportunity of working in many wonderful locations across the Blue Mountains.

My passion for the environment came out of a passion for justice. Initially trained as a Community Social Worker, I worked on a range of community projects, from child protection to public transport, to further the goal of social justice.

In search of a bit of a rest from the demands of community advocacy and welfare, I entered an apprenticeship in carpentry and then qualified as a builder in Bathurst. A carpentry position on the NPWS Heritage Centre at Blackheath brought me to the Blue Mountains. Later working as a builder, I became acutely aware of the huge impact our 'dream homes' were having on other beings and on our environment.

My passion to do something positive to conserve the Blue Mountains was kindled by the TAFE Bush Regeneration course, Bushcare and other community groups including the Blue Mountains Conservation Society.

I look forward to adding my contribution to that of others, both volunteers and paid, who have built an excellent program. Together I am sure that we will continue to make a big difference.



Pitt Park, Wentworth Falls –

The missing link

A new Bushcare group is about to start at Pitt Park in Wentworth Falls. The reserve is behind the School of Arts and is the missing link between Jamison Creek and Wentworth Falls Lake. There are a cocktail of weeds to excite all those Bushcarers who love a bit of primary work! Plans are a foot to start with an **Open Day on Saturday 23rd August at 2.30pm**. If you are interested in becoming a founding member or know anyone who might be interested in joining the challenge, please contact Natalie at the Bushcare Office on 47805623. If this day doesn't suit you and you are interested, let Natalie know what times/dates might suit you better.



Well done Jamison Creek Bushcare Group for initiating this new group!

Natalie Knipler

An answer to those eroding tracksTrackcare

During February, members from the Jamison Creek Bushcare Group undertook an activity called 'Trackcare' on its Bushcare day. The team transformed what was previously a very rocky uneven pathway into well structured steps using materials available on site. Eight steps were constructed leading from the entrance of the Fletcher St access track down to Darwin's walk. With great enthusiasm and hard work, the group used their existing knowledge, whilst learning new techniques to complete the task. Kieran Hitchell, from Council's Walking Tracks Team offered guidance and assistance in techniques used by Council. The team was shown the essentials of grade 2 track and step construction. The Trackcare activity tied in with the BMCC Track Work Programme for Darwins Walk and the day was a great success. Well done Jamison Creek Bushcare Group!

Trackcare is a program available to assist Bushcare groups in maintaining tracks on bushcare sites. Talk to your Bushcare Officer to discuss the suitability of this program for your Bushcare group.



PLANT WATCH

Many Bushcare members have commented on the unusual flowering times of some plants this year.

The Autumn edition of "The Gardens" the magazine of the Friends of the Botanic Gardens Inc, carried an article about this very subject, by Dr Tim Entwisle, the Executive Director of the Botanic Gardens Trust.

"Every time a plant flowers, fruits or drops its leaves, it is responding to changes in temperature and rainfall as well as day length. It follows then, that our bushland will tell us something about climate change" says Dr Entwisle.

"At a recent meeting of the heads of botanic gardens from Australia and New Zealand, we agreed to organise a national research and monitoring program based on plant collections – both living and preserved – and native bushland", he added.

Dr Entwisle is developing a tentative program called *Plant-Watch*. He outlines his plan to collect some baseline data on a few target species. "For example, when do our widespread wattles start to flower each year, in the wild and in our gardens. We can then follow the same species over many years to see if these characteristics change in any way, and importantly if any change is correlated with seasonal or longer term climatic shifts." Historical information from botanic gardens databases will also be used. "Tim Flannery makes the important point in his book *The Weather Makers*, that the cues for pollinating insects and flower development may be different (e.g. tempera-

ture and day length respectively) leading to severe consequences for animals and plants if the climate (e.g. temperature) changes."

Dr Entwisle suggested that anyone living near some native bushland could help *PlantWatch* by monitoring the flowering time of the selected species. Maybe our Bushcare groups may like to assist?

"I'm also personally keen to replace our Northern Hemisphere seasons with something that actually makes sense in Australia. Granted it would have to vary across the country but it would help us to be more attuned to the environment and its changes. *PlantWatch* data would help us define sensible plant seasons, and to link with the already well-established Aboriginal seasons", says Dr Entwisle. "We'll pull this program together in the next few months and make sure it has a sound scientific basis", he added.

If you or your group is interested in being involved in this monitoring project, write to Dr Tim Entwisle, Executive Director, Botanic Gardens Trust, Mrs Macquaries Road, Sydney NSW 2000 Australia.



DOWNSTREAM OF YOUR BUSHCARE SITE



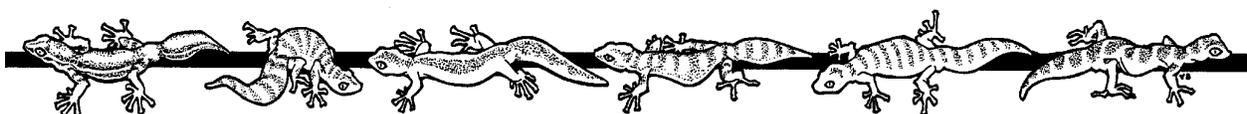
Two recent events, coordinated with National Parks, enabled Bushcare Groups to explore and weed downstream of their normal sites, and gain the help of other volunteers too.

The **Water Nymphs Dell** Bushcare Group of Wentworth Falls was keen to know if and how much weed was escaping down the creekline and into the National Park. After working for several years in the swamp and woodland areas above the rainforest and around the upper reaches of the creekline, the Group was keen to explore.

A wonderful day weeding and walking down a tributary of Blue Mountain Creek and into the rainforest of Water Nymphs Dell was held in March. Whilst some weeds were found, mainly Tutsan and Privet seedlings/juveniles, and some weed grasses, it was a relief to find that the weed density was quite low. There were also some lovely surprises – a small native snail, a variety of fungi in all shapes and colours and beautiful scenery.

In April, a very pleasant drizzly day was spent weeding along almost 2 kms of the beautiful **Popes Glen** Creek at Blackheath. This involved volunteers, two Council Bush Regeneration Teams, a Bushcare Officer, NPWS field officers and rangers. This was a successful exercise, covering the creekline downstream of areas normally worked to Horseshoe Falls. Gorse and broom were the main culprits treated along the banks of the creek. It was good news to see how well the bushland had regenerated and only a relatively small number of weeds were found. Scattered blackberry, montbretia and himalayan honeysuckle were also treated.

Other Groups may be interested to organise a remote weeding walk beyond their usual Bushcare worksites. As well as being a fun day, combining a bushwalk with bushcare, it can assist in better understanding your site. It can help with prioritising your work by knowing what weeds may be escaping. Hopefully, like Water Nymphs Dell and Popes Glen, it could demonstrate how your bush regeneration work is safeguarding areas further downstream, and ultimately the National Park.



THE BEGINNING OF BUSHREGENERATION IN AUSTRALIA

The Mount Tomah Botanic Gardens are hosting an exhibition by the Powerhouse Museum on the beginnings of bushregeneration in 1936 in Broken Hill, from Thurs 15 May to Thurs 19 June.

Greening the Silver City: seeds of bush regeneration is a travelling exhibition which highlights a collaboration between community and industry in creating one of the first bush regeneration sites in Australia.

In 1936, the Barrier Field Naturalists Club led by Albert Morris, enlisted the help of a mining company and revegetated an area using local native plants. This effort was prompted by major dust storms and the threat of sand swallowing up the outskirts of the famous mining town.

In 1936 an initial area was fenced and planted with vegetation native to the area. Now known as the Albert Morris Park, this initial area was not only a successful re-vegetation site but also displayed successful regeneration. In 1938 when more sections of land were fenced from grazing rabbits and livestock, these were left to regenerate and no planting was undertaken.

Albert Morris, a Quaker and self taught amateur botanist developed a passionate interest in plants from a young age and founded the Barrier Field Naturalists' Club, named after the nearby Barrier Ranges. He led this devoted team and his work was far ahead of his time, which was continued on by his wife Margaret Morris after his death in 1939.

The Broken Hill landscape was seriously affected by settlement, originally the country side was covered with woody mulga scrub. After the mines opened in 1885 the rapidly growing township required wood for building, fencing, firewood and fuel for the miner's steam engines. Trees and shrubs disappeared and newly introduced goats, cattle, horses and camels grazed the

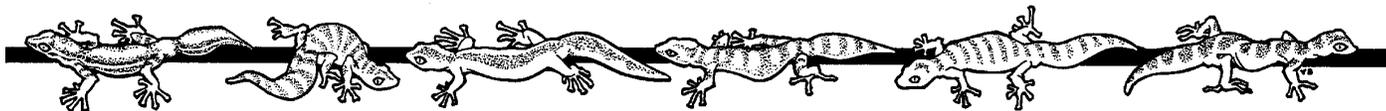
cleared land, the landscape soon became denuded and desolate. Without vegetation, big winds blew away the top soil and major sands drifted to the city outskirts.

Albert Morris's legacy does not limit itself to Broken Hill as he amassed a collection of about 7,000 plant specimens and his collections are represented in several of Australia's major herbia. More than 1,000 of these are held in the Sydney Royal Botanic Gardens. His methods were applied to other mining towns in Australia and the improvement of living conditions in Broken Hill were quoted world wide.

Interviews with local Blue Mountains bushcare volunteers will be included with the exhibition. Go to www.powerhousemuseum.com/exhibitions/greening for more details on the traveling exhibition.



Your Newsletter: This newsletter is compiled by Lyndal Sullivan (assisted by Sharon Huxley) from Blue Mountains City Council with contributions from Council's Environmental Management Staff and members of the Bushcare Network. It is sent to Bushcare volunteers and other interested people. Contributions and suggestions are always welcome, as are requests for alterations to the mailing list. We can be contacted at Blue Mountains City Council, Locked Bag 1005, Katoomba NSW 2780. Phone 4780 5528; e-mail lsullivan@bmcc.nsw.gov.au; Fax 4780 5349.



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