COOLEMAN RIDGE PARK CARE GROUP

Newsletter January 2010

Previous Sunday meeting December 13th

The President's Report follows:

Fired up

Instead of our planned December working bee on the trail, we walked through the burnt-off fenced regeneration area with Malcolm. It was a most informative exercise, followed by a convivial picnic morning tea in the shade near the Gills' house.

Here's what I gleaned from the walk with Malcolm –

"Burnt, not destroyed – that's what we see here. Fire is a necessary part of the natural processes here. Some plant species need fire to regenerate." With these reassuring words, Malcolm told us he'd been present while the asset protection control burn took place on November 25th . There had been 2 trucks and 2 light tanker units present, (9 men, 1 woman, he estimated). It had taken the team all day to conduct the burn of this 4-hectare area. They had worked carefully, starting the fire below the crossroads on the management trail and burning slowly across and down the reserve. In two places, the fire had escaped briefly beyond its intended path before being put out. "Fires burn faster uphill, so they try to burn around the contour and downhill. But gusts of wind or changes of wind direction alter its behaviour."

How do they start a fire? Malcolm explained the mysteries of the Drip Torch – which describes the operation of the device, not its operator!

We stopped in the shade of a scorched eucalypt, where Malcolm explained how leaf damage from smoke and heat occurs well above actual flame height. Mistletoes are particularly susceptible to scorch, having no roots in the ground from which to recover. (We'd been aware that most were killed in 2003.)

On the ground, white ash showed where complete combustion of twigs and litter had occurred. Blackened bark and litter showed charring – combustion was incomplete here and vegetable matter still remained. Where very hot burns occur, as in the pine forest windrow burn-offs that are visible still on the slopes of the mountains to the west of our Reserve, the soil may release phosphorous and other nutrients to create a particularly fertile seedbed for regenerating vegetation if seeds are still present.

Fire scars and hollows in the base of trees tell a most interesting story. Flames rise higher on the lee side of the trunk, which is usually the uphill side. Damage to the bark occurs and recurs with successive burns. Without its protective layer, the tree is susceptible at the scar to insect attack (borers and termites especially) and to fungal infestations. It will regrow its bark and sometimes entirely close over the damaged section, but is likely to have internal hollows. When fire recurs, these hollow trunks can catch and act as chimneys, causing an intense up draft and fierce flames. In a control burn, care is taken not to allow fire to take hold of older trees in this way, as they can be very difficult to put out. We saw later, on Fencepost Hill, the newly fallen ruin of a dead, hollow tree felled in just this manner.

But hollows are important to our bio diversity. "Australia has an enormous variety of hollow-dwelling and hollow-nesting birds and arboreal mammals."

Malcolm explained that there are four elements that affect how damaging a fire will be to a natural environment. They are

- Interval since the last fire
- Intensity of the fire
- Season (spring, autumn, summer, winter)
- Fire above or below ground – if it is peat (or coal seam or oil shale) it can burn for a very long time.

He also explained that the asset protection burns have to take place in spring or early summer. If burning is done in autumn, the grasses have regrown in spring and the household asset will not be protected from fire.

As this area has not been burnt since 2003, and has carried excellent crops of native grasses over the past two seasons, we are very hopeful that this carefully conducted cool burn will prove beneficial to our regeneration work. For the moment, it has largely eliminated any need to weed! Until rain comes, we are contenting ourselves with documentation, which we will continue doing at least weekly for the whole year.

With our intimate knowledge of the plants in this area, we have an ideal opportunity to report the effects both of the burn and of the methodology used. With regard to the latter, there are wheel tracks all over the regeneration area – no vehicles had been in it since 2003. Malcolm mentioned that compaction from wheel tracks can increase the germination rate for some seeds – our friend Paterson's Curse *Echium plantagineum* being one such. Soil disturbance, such as wheel ruts, often provides a seedbed effect but can also erode. Erosion is a concern for us here, and we will watch the active gully and the drainage line very carefully. Although exposed again, the gully now has a great deal of ashy vegetable material in the bottom. ***Arminel*** ☼

Control burns

A 2nd burn along our urban fringe was conducted on December 2nd with more scheduled to follow. ☼

Future programme

Next meeting, Sunday January 17th

- GAN/Chauvel for clearing exotic growth. Plant ID
- 8.00-10.30 am
- meet at the Kathner St entrance, or at GAN/Chauvel
- bring hat, gloves, hacker, drink, snack ☼

Season's greetings from CIMAG

Canberra Indian Myna Action Group reports that before the start of their trapping programme in 2006 Indian Mynas were the 3rd most abundant bird in Canberra, as determined by the Canberra Ornithologist Group through their weekly Garden Bird Survey. After the first year of trapping mynas had dropped to 9th, and after another twelve months they were down to the 12th most abundant.The 2008-09 survey shows mynas are now down to 14th place, effectively the level they were at in 1990. ☼

New Year stroll

Morning cloud cover on the first Monday of the year made for pleasant walking conditions along the Kathner St Trail. The dam is holding water from the Christmas rain.

The first surprise was to find the gate before the notice board padlocked in the open position. Although a step-through had been planned for this point we agreed with the rangers to keep the gate closed but unlocked in the interim to discourage horse riders from straying off the Equestrian Trail where they are permitted. And sure enough we met 2 riders on the management track after we had come down from Cooleman Trig. In their defense it might be argued that signage for horse riders is inadequate. However that may be we chatted to a patrolling fire crew driving the track and they promised to look into it: on our return the gate was restored to the closed but unlocked position.

Along the Equestrian Trail near the old dam there was copious cattle dung. The gate into the Fuel Reduction Trial Area was held open with twisted wire but the only animal spotted there was a swift-running fox. Late last year Gösta chatted with the agisting farmer who assured him that

- he was doing the Ridge a favour by grazing
- his farm did not carry weeds
- his cattle did not eat native plants.

Perhaps the cattle have been removed though the ACT Government water tank is still there. On the gate is a curious notice about a community grazing project with a request to keep dogs on lead near cattle. The author of this notice must be unaware that dogs are always to be kept on lead in the reserve.

The old dam was a sorry sight, skirted by large *Onopordum acanthium* (Scotch Thistle) bushes. In days gone by this dam held water even after the Kathner St dam dried out. It is many years since there were caretakers here, and a resumption of activity would be pointless now, with the annual influx of livestock.

The track down Cooleman Trig continues to widen and erode as people walk to the side. On stepping a few more metres to the side a rabbit warren can be found. This has now been reported to both Nina Bruns (ranger) and RabbitScan. ☼

Gösta's pictures