

Planned Burn Notice – SNP0024

Burn Reference: SNP0024, LANGWARRIN – DUNE TK

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DSE: Why: To reduce forest fuels!

It seems like a joke as there is no forest in the area. Then, on the notice above the line that reads 'where, when, and why' a line ends in ... 'to maintain the health of plants and animals that have become to depend on fire to survive'. So, which animals depend on fire – what plants depends on fire? – there are none in Langwarrin! Where does DSE gets these ridiculous ideas? Fires kill, kill and kill, and this was demonstrated in the March 2012 burn, Thus is completely opposite to the statement. The fact that several species and large colonies of greenhoods (*Pterostylis*) occurred in this burned area was a good indication to never burn such a habitat. Did anyone come and look at the site or consult someone who knows the reserve? In the regards to the **WHY** to burn, The *Langwarrin Flora & Fauna Reserve* can certainly not be classified as a forest, thus does not even belong in the political saga.

In the type of habitats of the *Langwarrin Flora & Fauna Reserve* an entire ecosystem gets destroyed by fire and takes decades to recover – if at all. With almost no buffer zones left, there is no re-introduction of the native plants that vanish in fires. Instead the exotic plants and the bracken grow prolifically after a fire and form monocultures. All the small trees (*Kunzea*, *Leptospermum*, *Melaleuca*) are usually totally burned and it takes about 20 years for stands to grow to a height to form a canopy. The 1999 fire did a lot of damage, several species of orchids were lost (never recovered) and fields of the Sydney exotic Sallow Wattle sprung up that took a lot of work to get rid off and still needs to be completed in some areas. In the 1999 burned areas the tall *Leptospermum* stands are only just getting back to height so the ground habitat can recover and return to normal. It will probably be another 5–10 years to fully recover. The previous March 2012 burn was a disaster from an ecological point of view with the total wipe-out of most habitats. In addition it created a real fire-hazard situation the following Summer. Original undergrowth was always green prior to the burn and kept the ground moist, even in Summer. With the canopy killed and few trees doing poorly, the carbon-enriched soils and light was perfect for growth on the ground that is now covered in 1 m tall straw grasses, debris from dead trees and dying bracken as it dried out very quickly during this Summer. The area was opened up and is now fully exposed to the northerly winds during a heatwave, thus the burning created a perfect situation for a fast moving fire as there is nothing to stop it.

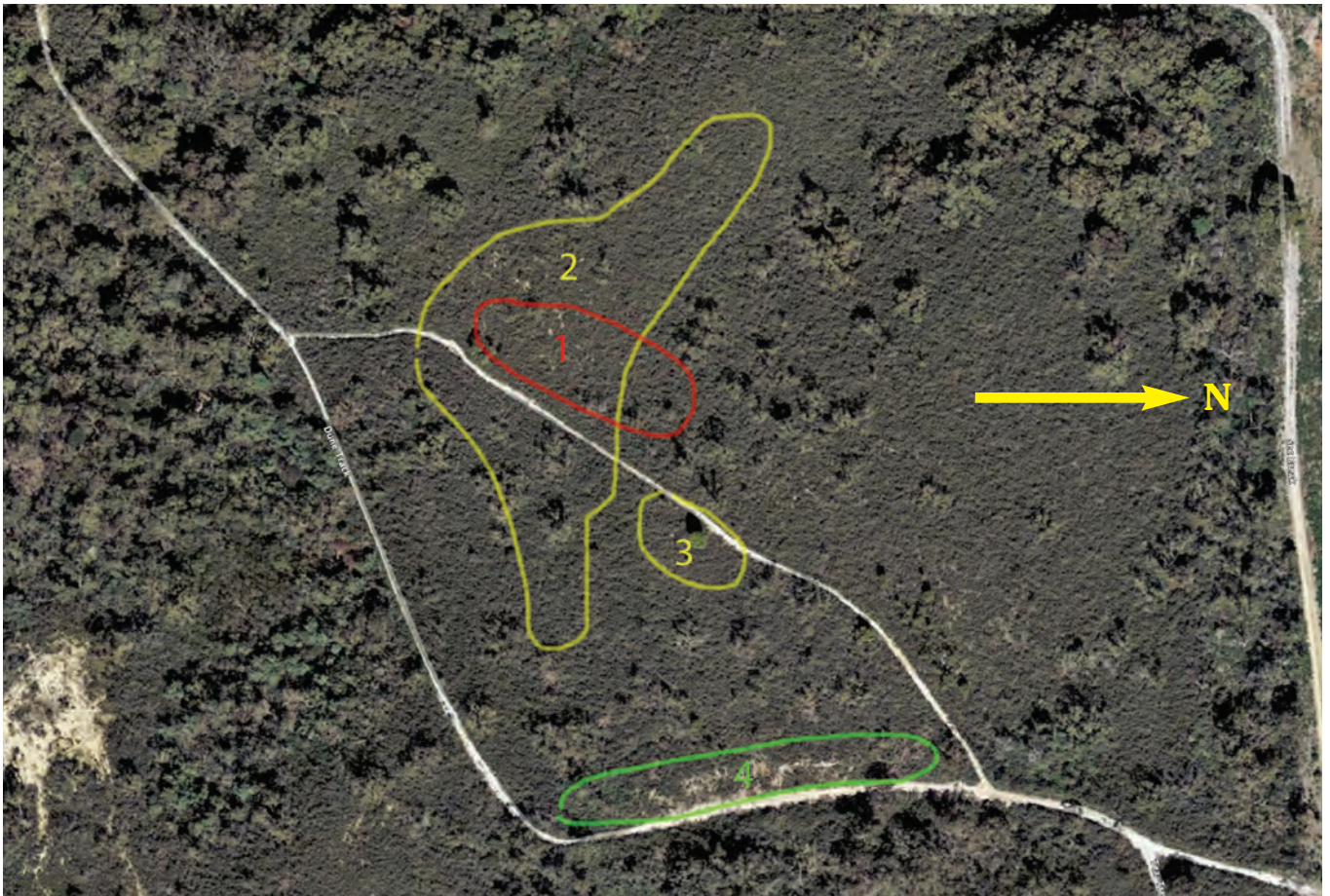
Proposed Langwarrin 2013 burn – Orchids

It is named the *Langwarrin Flora & Fauna Reserve* and the reserve was created to protect our native species. The signs state 'ALL NATIVE PLANTS BIRDS AND ANIMALS ARE PROTECTED, but protected from who or what? In March another sign was placed that stated FIRE PREVENTION WORKS currently on the way, and then it was set alight! Actions taken were the opposite to what was stated. The 2012 March burn killed the intermediate sized trees, removed the canopy over the low-lying areas and promoted exotic plants, grasses and bracken. So much for protection! It was pure vandalism and the outcome was the complete opposite to the supposed-to-be reasons for burning areas in the *Langwarrin Flora & Fauna Reserve*. The more open understory dried much faster compared to the way it was prior to the burn, when the ground was covered by green shrubs. A wildfire would travel about 3x as fast in such open dry habitats. Thus, within one year an actually real fire-hazard was created. The flora and fauna reserve should be totally protected, especially from office fire-bugs that destroys the entire ecosystem under false pretences to make up numbers and burning areas that are of no benefit to anyone. Fire prevention is important, but should be conducted sensibly, such as by keeping the original fire-breaks wide and clear, especially along the southern end, as the hot winds are northerlies.

That orchids do better after fires is a myth and is based on prolific flowering of some species that occur in areas where fires are commonly caused by lightning. Seeing lots of flowers does not necessarily mean that it is good for the plant itself. In fact it kills many as all the plants' reserves are put into seed production, a survival strategy for the future. They flower after a fire for one to three seasons, progressively becoming smaller and then disappear and if tubers survive is not known. It may take decades for a habitat to recover from wildfires to which orchids have adapted by producing seeds, as the plants themselves usually vanish in a few years. Seeds can remain dormant for decades until the habitat has fully recovered and mycorrhizal fungi germinates them.

The area proposed for another burn, shown in the image, is a good example why this should never be done. After all, it is part of a *Flora Reserve* and the fact that it has several unique orchid species would be enough reason not to burn. This small area is in good condition, as it was only lightly occupied by the Army, and the dune habitat has become limited to few small patches on the Mornington Peninsula. In the *Langwarrin Flora & Fauna Reserve* the dune section has several colonies of the Greencomb Spider orchid *Caladenia tentaculata* var. *tensa* that were thought to be restricted to Little Desert, but occurs in the sand belt habitats on the Peninsula and is known only from the *Langwarrin Flora & Fauna Reserve* and *The Pines*. In Langwarrin several small colonies occur in the red-encircled marked area-1. The Bearded Greenhood *Pterostylis tasmanica* var. has a good number of flowering plants scattered throughout that part. This is an undetermined taxon of an already rare species and it only occurs in the yellow encircled area-2 of the reserve. There is a moderately large colony of the Banded Greenhood *Pterostylis sanguinea* in the yellow encircled area-3, that is now a rare species in our area. Good populations of the Tiny Greenhood *Pterostylis parviflora* are in the green encircled area-4. Once a common species, but the reduction and decline of habitats severely reduced their numbers. The Bearded Midge-orchid *Corunastylis morrisii* also occurs in the general area shown, but mainly along the tracks. A number of other species occur there that are generally widespread, such as several sun-orchid species, waxlips, small caladenias etc. All the orchid species were once common, but 'protection' by burning is a major factor to turning one after the other into a rarity.

In my opinion there is no reason at all to burn the area, nor a good time for the orchids to burn the area. It should certainly not proceed as it will finish some of the species that are rare and reduce numbers of all the species. Common species are threatened just as much as the rare ones.



Reservoir section, the proposed burn for 2013. Northwest section has low shrub, very few trees. It is part of the *Langwarrin Flora & Fauna Reserve* and several orchid species would be lost in a burn. The area forms no threat from a fire-hazard point of view and it makes no sense to burn this section, but a clean-up of the Coastal Tea-tree inside the fence of Telecom would make sense.



18 January 2013

Burned March 2012. View from the north. Habitat destroyed and now a fire-hazard. Most trees killed, almost a grass habitat.



18 January 2013

Burned March 2012. View from the south along Stringybark Track. Left-hand untouched side and green, right-hand burned side browning with thick leaf litter, dead shrub materials. Which side would now burn best? Image below shows the same area looking in to the right from the track. It will get worse over time and this should be classified as fuel-promotion. The Hyacinth Orchid *Dipodium roseum* in the centre was a lucky one as most were eaten in the burned area and this one was missed by the slasher as well. It was pushed over during the slashing, but I managed to stand it up again. On the green side of the track the hyacinth orchids are scattered in their normal numbers and very few get eaten by macropods ... being protected by shrubs.

Orchids were monitored at the burn site until January and an estimated 90% of the plants were lost and several species may not recover. The very large populations of Bird Orchid *Chiloglottis gunnii (valida)* vanished in the low lying parts and the only two known populations of the Mantis Orchid *Caladenia tentaculata* also vanished, A few species survived on the margins of the area that was partly burned and not destroyed by the vehicles or the raking and hosing that followed (report available on request).



18 January 2013