

Liberation Ecology - the basic principles of habitat rehabilitation

Before any work commences, assess, plan, [prioritise](#). Plans should realistically operate over decades rather than years. It took 150 years to degrade it

Liberate the best bits first. Work from the highest quality, most diverse areas and move outwards from there

Work slowly and systematically, liberating areas in order of their [vegetation quality values](#) and weed prioritisation and timing needs

Follow the Golden Rule - if you aren't 100% sure it's a weed, don't pull it out. Many well known weeds have lesser known indigenous look-alikes

Adopt minimal disturbance weeding methodologies - soil disturbance inevitably leads to more weed invasion

Annual grasses (all annual grasses are weeds, except one, not found here) can be eliminated by mowing before just seed set. The same applies to most annual and biannual weeds

Resist the urge to plant first and ask questions later. If you remove the threatening processes i.e. weeds, animals, people etc, remnant bushland will usually [come back by itself](#). Many indigenous species have seeds that persist in the soil for decades. Waiting and seeing is a valid and valuable management approach. Patience, Grasshopper....

Consider direct seeding first, before buying plants. If areas of the site are assessed as needing certain species enriched or reintroduced, always consider direct seeding first, using seed from the site or very nearby. Sometimes germination may take some years. Again, patience and the long term view should prevail

Minimal chemical usage – for a number of reasons including inevitable off-target damage, ground story and cryptogamic layer biodiversity loss, soil nitrification (glyphosate), bio accumulation, OH&S issues, costs involved etc.

Minimal use of mulch – although mulching can be very useful in a revegetation and a garden bed situation, when restoring remnants its use is usually unnecessary and can actually result in a net loss of biodiversity! It can nitrify the soil and brings with it the risk of introducing weed seeds, foreign fungi and suppressing regeneration of the usually prodigious indigenous seed banks, particularly the small herbs, forbs, mosses and annuals that you can't buy in tubes.... Natural litter layers are not measured in inches, more often as a percentage cover of the visible soil layer

Take 'before and after' photos from marked photopoints, at the same time of the year, for long term monitoring purposes

Be mindful of buffers e.g. even some woody weeds can at times provide buffers from adjacent grassy weed invasion

Be mindful of habitat e.g. check for birds' nests, possum dreys and other signs of fauna usage. In some cases leave weeds that provide habitat until replacement indigenous species are established or at least carry out a staged removal over time

Leave wood on the site. Both dead trees and ground wood are carbon and habitat. Resist the "clean up the bush" urge. Dead and fallen wood is essential habitat for fungi, invertebrates and reptiles. If ground wood has been removed or is scarce consider bringing some in. For wildfire safety considerations, "elevated fuel" is the main danger and is considered to be anything under the thickness of a man's thumb. Logs on the ground are not "fuel"

When concentrating on a particular weed species, remove mature, seeding individuals first

When concentrating on a dioecious weed, remove females or fruiting individuals first e.g. Pittosporum

Observe hygiene procedures e.g. clean shoes, clean tools and bagging of weed seeds, or other means of removal from the site

Timing is an important consideration. Weed control is generally best undertaken when species are flowering, prior to seed set. In sites where orchids or other geophytes and annuals are present, undertake works in these areas to coincide with the time that these species are dormant, or post seeding

Highly sensitive areas, such as orchid sites, require highly sensitive weed management. This is due to the fact that orchids rely on intact surface layers, composed predominantly of mosses and small annual herbs