

## When buying stock feeds or animal bedding materials

Stock feeds and animal bedding can be carriers of weed seeds. Weeds such as the parasitic plant, Dodder and Spiny Emex can be accidentally harvested with the crop and be distributed over vast distances.

Weeds in these products are more prevalent during droughts as feeds are transported over large distances and weedy feed crops that would usually not be utilised as sold as good quality feeds are used up.

This problem is compounded by the drought due to the fact that the grass cover is depleted and sparse from lack of water and animals grazing the little grass that is still green. This leaves the pasture open to weed seeds.

### This can be avoided by following a few of these tips.

1. Try not to overgraze your pasture. Pasture improvement (correct pH, adequate nutrients, forage species added) can be beneficial and provide good coverage to prevent the invasion of weed species.
2. Buy stock feeds from reputable suppliers. Ask about the weed free status of the feed.
3. Check bales of Lucerne for contaminants when breaking open for feeding.
4. Feed animals in the same places every time. There will be fewer places to regularly check to see if anything germinates.
5. Be suspicious of cheap feeds, especially during drought times. This could be weed infested second rate material. If this material is purchased, check the feed very carefully before using.
6. When buying animal bedding, check for any foreign matter, it will usually be a different colour to the bedding.
7. When disposing of soiled bedding material, compost first before using as a fertiliser or mulch. This will have a twofold effect of killing any weed seeds and mellowing any overpowering nutrients.



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## Soil and fill

Soils and fill can be contaminated with a range of weeds. This can occur by the soil being stockpiled at its source and being exposed to wind borne seeds and seeds in bird droppings.

Cheap or free fill is often from sites where pools are being built or house foundations. The topsoil from these sites can carry grass weed seeds and a variety of fruiting weeds. If you are purchasing soil eg. topsoil or garden mix, ask the supplier if the product is guaranteed to be weed free.

Weeds often found in topsoil such as Brazilian Clover (*Richardia braziliensis* or *Richardia stellaris*) can be near impossible to eradicate and can take over a lawn.

When purchasing fill or arranging free fill, ask where the fill is coming from and what plants/ weeds were growing in the area. If the area has weeds, ensure that the fill will be covered by a layer of weed free material to inhibit any weed growth.

## Weeds spread by people

People can be the cause of weed spread both accidentally and on purpose. Weeds are carried around by people in a number of ways. The soles of shoes is a common way for weed to get around, Bindi-eye is a good example of this, as it is often found along footpath areas where the foot traffic is heaviest. Other ways can be by seeds stuck in garments such as Cobblers Pegs and burrs and in turned up pant cuffs and pockets.

People sometimes bring weeds on to their property in the form of plants or seeds of weeds without knowing that the seeds/plants are weeds. These are often gifts from family or friends or cuttings/seeds taken elsewhere and brought home. Weeds often spread by these means include, *Salvinia* and *Water Hyacinth*. Another weed that was widely spread by people is *Alligator Weed* (*Alternanthera philoxeroides*). This was spread through the Sri Lankan community accidentally by being mistaken for *Mukunuwenna* or *Poonoongari* (*Alternanthera sessilis*).

### What can you do to avoid introducing/spreading weeds?

1. After being in a weedy area (such as overgrown areas on farms etc) check shoes and clothing and hat for seeds and clean before leaving the site.
2. Check picnic blankets, base of baskets, sun shelters for sticky seeds/ burrs and clean off if necessary before leaving the site.
3. Vacuum the car regularly and dispose of the collected waste in a sealed bag in the garbage.
4. Be wary of plants/seeds/cuttings offered to you by family and friends, if you do take some home, grow them in pots for a year and check the surrounding area to make sure they haven't spread.
5. Keep lawns clean and free of weeds.



For further information contact Council's  
Noxious Weeds and Pest Species Officer  
Gosford City Council **4325 8432** or Wyong Shire Council **4350 1690**



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## Procedures for preventing weed seed spread on machinery, animals and other sources.



Weeds are spread in a variety of ways including wind, water, birds and deliberate introduction.

Weed seeds are often the cause of infestations and are accidentally spread by contamination. Vectors of spread can include machinery, animals, vehicles, stock feeds, soil and even ourselves.

This brochure is to raise awareness of weed seed spread and how to prevent or minimise the risk of this happening.



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Many weeds can be spread by seed and have evolved mechanisms to aid their spread. These include:

- Small barbs that catch on clothing or fur eg. Burrs, many grass seeds, Farmers Friends /Cobblers Pegs (*Bidens* sp) and Chilean Needle Grass.
- Large barbs that lodge in hooves, shoes, tyres, etc eg. Spiny Emex, Caltrop.
- Sticky seed coatings eg. Parramatta Grasses
- Edible fruits eg. Blackberry, Lantana
- Parachutes eg. Pampas Grass, Balloon Vine and Fire Weed.

## Seeds can arrive at new areas in a variety of ways, they can be:

- On vehicles in the mud under vehicles and in wheel wells, in the air filter, the radiator, bumper bars and grilles, stuck in suspension components and stuck in the tyres.
- On animals, in the hair / fur, in or on the hooves, or in the digestive system.
- In or on machinery such as tractors, backhoe/ excavators, harvesters, mowers, line trimmers etc.
- Stock feed such as Lucerne, Hay and beddings such as straw.
- Contaminated soil, soil brought in from other sites can hold a multitude of weed seeds and plant stems that may regrow.
- People can move weed seed by accident through seeds lodged in clothing, shoes, upturned pant cuffs and pockets.

## Procedure for vehicle clean down.

The procedure below is effective for most weeds and especially for vehicles that have been moving through properties with weed grasses, if bringing a vehicle on to the property that has come from an area or property where weed grasses are present, this procedure should be carried out prior to the vehicle driving around the property.

Place vehicle in an area of the property that is level (or close to level) that is not in a high traffic area and that can be regularly and easily inspected for any weed growth that results from weed seeds that are removed/fall from the vehicle.

A site near the entrance to the property is desirable so that contaminated vehicles entering will have a reduced risk of spreading any seed on the rest of the property and vehicles that have been decontaminated won't pick up any new weed material before leaving the property.

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1. Visually inspect the outside of the vehicle for any obvious weed material, remove by hand and bag for disposal.
2. Inspect the tyres and wheel wells for mud, scrape or wash off as needed.
3. Inspect bumper bars, grille and radiator. Hand remove any large weed fragments and compressed air or high pressure water jet is effective for removing small seeds or fragments.
4. The air filter box and element should be checked and cleaned with any materials collected bagged.
5. The suspension and steering mechanisms should be checked and cleaned as appropriate.



## Procedure for quarantining of new animals.

When bringing animals on to a site that are coming from properties where weed plants exist or the weed status of the property is unknown, it is wise to follow these procedures to reduce the risk of new weeds being introduced. This procedure is sound practice as when animals are introduced to a new property, the first thing they usually do is test the fence for escape routes. During this process, the animals defecate and seed may also fall from the hide/ hooves.

Fence off a small part of the property that is not in a high traffic area and that can be regularly and easily inspected for any weed growth that results from weed seeds that are passed or fall from the animal.

When new animals are brought on to the property, place the animals into this area for no less than 10 days, if the pasture is not adequate feed for this period, supply clean feed to the animals for the period. At the end of this period, any seed in the animals' digestive system will have been expelled and most seed in the hide/ hooves will have dropped off.

Check the hide for any large burrs and hand remove/ cut out as necessary and bag for disposal or burn.

After the animals are released from this quarantine area, monitor the area for any weed growth and control any weed growth.

## Procedure for machinery clean down.

The procedure below is effective for most weeds and especially for machinery that has been moving through properties with weed grasses, if bringing machinery on to the property that has come from an area or property where weed grasses are present, this procedure should be carried out prior to the machinery being moved around the property.

Place machinery in an area of the property that is level (or close to level) that is not in a high traffic area and that can be regularly and easily inspected for any weed growth that results from weed seeds that are removed/fall from the machinery.

A site near the entrance to the property is desirable so that contaminated/suspect machinery entering will have a reduced risk of spreading any seed on the rest of the property and machinery that has been decontaminated won't pick up any new weed material before leaving the property.

1. Visually inspect the outside of the machine for any obvious weed material, remove by hand and bag for disposal.
2. Inspect the tyres/ tracks and undersides for mud, scrape or wash off as needed.
3. Inspect bumper bars, grille and radiator. Hand remove any large weed fragments and compressed air or high pressure water jet is effective for removing small seeds or fragments.
4. The air filter box and element should be checked and cleaned with any materials collected bagged.
5. The suspension and steering mechanisms should be checked and cleaned as appropriate.
6. Inspect any crevices where seeds may be sucked in or settle.
7. If the machine has any hydraulic rams or attachments, inspect around the seals or any places that may weep fluid. Seeds often get stuck to this fluid and may come off at a later time or when washed off.
8. Inspect any greasing points near articulated joints. Excess grease squeezed from the joints is a common place for seeds to be lodged.
9. If the machine has caterpillar tracks, thoroughly inspect the tracks and drive sprockets for any weed material and hand remove large pieces, use a water pressure cleaner to remove any soil that may contain any seeds or plant fragments.

