

Controlling Weeds

General Principles for weed control on the Gold Coast:

Weed control in Queensland, especially in areas like the Gold Coast with its subtropical climate, is an ongoing battle. Weeds thrive in warm, often wet conditions, and many invasive species have become well-established. Effective weed management involves a combination of strategies.

Here's a breakdown of how to control weeds in Queensland:

1. Identification is Key:

Before you start any control method, it's vital to identify the weed. Different weeds respond to different treatments.

• Common Queensland Weeds:

- **Grassy Weeds:** Paspalum, Crabgrass, Winter Grass, Crowsfoot Grass, Nutgrass (a sedge, often mistaken for grass).
- Broadleaf Weeds: Bindii, Capeweed, Oxalis (creeping woodsorrel), Dollar Weed, Cobbler's
 Pegs (Farmer's Friends), Dandelion, Clover, Fleabane, Fireweed.
- Woody Weeds & Vines: Lantana, Camphor Laurel, Mother of Millions, Blue Morning Glory, Asparagus Fern, Bridal Creeper, Cat's Claw Creeper, Singapore Daisy.
- Resources: Use online resources from Queensland government (e.g., Department of Agriculture and
 Fisheries, Business Queensland) or local councils, or consult local nurseries. If you're unsure, the
 Queensland Herbarium's Weed Spotters Network can help with identification.

2. Prevention: The Best Form of Control

Stopping weeds from establishing in the first place is the most effective strategy.

- **Mulching:** A thick layer (75-100mm) of organic mulch (e.g., wood chips, bark, sugarcane mulch) around desirable plants and garden beds suppresses weed germination by blocking light and creating a barrier. It also helps retain moisture and improve soil health.
- Healthy Soil: Good soil health promotes strong, competitive plants that can outcompete weeds.
- **Dense Planting:** In garden beds, plant desirable species closely together (considering their mature size) to reduce bare soil where weeds can establish. In lawns, maintain a healthy, dense turf.
- Clean Tools and Footwear: Weed seeds can be easily transported. Clean gardening tools, boots, and even pet paws after working in weedy areas.
- Buy Clean Materials: Ensure any soil, compost, or mulch you buy is free of weed seeds or plant parts.

• Water Smart: Water your desired plants efficiently and deeply, rather than broad-spraying your entire garden, which can encourage weed growth.

3. Physical/Manual Control:

These methods are labour-intensive but are excellent for targeted control and for gardens where chemical use is a concern (e.g., organic gardens, around edible plants, near waterways, where pets/children play).

- **Hand Pulling:** Effective for small weeds, especially after rain when the soil is moist. Ensure you remove the entire root system, as many weeds can regrow from root fragments (e.g., Nutgrass).
- Hoeing/Cultivating: Best for annual weeds. Shallow cultivation can sever young weeds from their roots. Avoid deep cultivation, as this can bring dormant weed seeds to the surface.
- **Weed Pullers/Tools:** Various tools are available to help remove weeds with deeper taproots (e.g., dandelions, docks).
- **Solarisation:** Covering an area with clear plastic sheeting for several weeks in hot weather can "cook" and kill weeds and seeds by trapping solar heat. More effective in the warmer months.
- Weed Burners/Flaming: Uses intense heat to scorch weeds. Best for annuals and young weeds. Not
 suitable for all weeds (especially perennial weeds with deep root systems) and requires caution due to
 fire risk
- Slashing/Mowing: For large areas of annual grasses or broadleaf weeds, regular slashing or mowing can prevent them from seeding, eventually depleting their seed bank. Not effective for prostrate weeds or those that regrow from underground parts.
- Ringbarking/Chipping: For woody weeds and trees, carefully removing a ring of bark (ringbarking) can kill the plant. This is generally for larger woody weeds, and care should be taken to avoid accidental damage to desirable trees.

4. Chemical Control (Herbicides):

Use herbicides as a last resort and always with extreme caution.

- Identify Correctly: Ensure you know the weed you're targeting and select the appropriate herbicide.
- Read the Label: ALWAYS read and follow the manufacturer's instructions exactly. This includes mixing
 rates, application methods, safety precautions, withholding periods (if applicable for edible plants),
 and environmental considerations.

• Types of Herbicides:

- Non-selective (e.g., Glyphosate): Kills almost any plant it contacts. Use with extreme care, away from desirable plants. Often used for spot spraying individual weeds or clearing areas.
- **Selective:** Targets specific types of weeds (e.g., broadleaf weeds in lawns without harming grass).
- Pre-emergent: Prevents weed seeds from germinating. Applied to the soil before weeds appear.
- Post-emergent: Applied to actively growing weeds.
- **Contact:** Kills plant tissue at the point of contact (e.g., acetic acid, pine oil-based organic herbicides). No systemic action.
- Systemic: Absorbed by the plant and translocated throughout, killing roots and shoots.

Application Methods:

- Foliar Spraying: Most common. Herbicide diluted with water and sprayed over foliage.
- Spot Spraying: Targeting individual weeds to minimise impact on surrounding plants.
- Cut Stump/Stem Injection: For woody weeds and trees. Cut the trunk/stem and immediately
 apply concentrated herbicide to the cut surface (within 15 seconds) or inject into drilled
 holes. This gets the herbicide directly into the plant's system.
- Basal Bark Spraying: Applying oil-soluble herbicide to the bark around the base of woody weeds.

- Wick Applicators: For precise application, wiping herbicide directly onto weed leaves, reducing spray drift.
- Safety Precautions: Wear appropriate personal protective equipment (PPE) like gloves, eye protection, long sleeves, long pants, and potentially a respirator. Avoid spraying in windy conditions or when rain is expected. Keep children and pets away from treated areas.
- Environmental Impact: Be mindful of runoff into waterways, and the impact on beneficial insects or non-target plants. Consider "organic certified" or naturally derived herbicides if chemical use is a concern. Products like Slasher or Bioweed (based on pelargonic acid or pine oil) are available in Queensland and offer rapid, non-toxic results.

5. Biological Control:

 This involves using natural enemies (insects, fungi) to control weeds. It's usually undertaken by government agencies for widespread, serious environmental weeds (e.g., Lantana biocontrol programs). It's not typically a method for home gardeners.

6. Integrated Weed Management (IWM):

The most effective approach combines multiple methods.

- Assess: Identify your weeds and the extent of the infestation.
- **Prioritise:** Focus on new weeds or those that are particularly invasive.
- **Combine Methods:** For example, hand-pulling larger weeds, then mulching the area, and spot-spraying any persistent regrowth with an appropriate herbicide.
- Monitor: Regularly check your garden for new weed growth and re-treat as necessary.
- **Revegetate:** Once weeds are removed, plant desirable native species to fill the space and prevent new weed germination.

Queensland Specific Considerations:

- Declared Weeds: Queensland has specific "declared weeds" (now called "invasive plants" under the Biosecurity Act 2014) that landowners have a legal responsibility to control. Check the Queensland Government's Department of Agriculture and Fisheries website for current lists and control obligations.
- **Tropical/Subtropical Climate:** The warm, humid conditions accelerate weed growth. Be prepared for continuous management.
- Rainfall Patterns: Take advantage of the wet season for easier weeding (when soil is soft) but be aware that rain can wash away freshly applied herbicides if not absorbed quickly.
- **Native Gardens:** For native gardens, focus heavily on prevention (mulch, dense planting) and manual removal. If using herbicides, select low-toxicity options and apply very carefully to avoid harming native plants, especially those sensitive to phosphorus.

By adopting a proactive and integrated approach, you can effectively manage weeds in your Queensland garden and maintain a healthier, more attractive outdoor space.