Opuntioid cactus: declared weeds of national significance

Opuntioid cacti or cactus (*Opuntia* species, *Cylindropuntia* species and *Austrocylindropuntia* species except *C. californica*) are declared pests in Western Australia (WA). This article describes the nature of the plant with links to requirements land owners/occupiers must adhere to and pest control methods.

Tiger pear (*Opuntia aurantiaca*)

**Appearance**

**Habit:** low spreading shrub to 0.3m tall. Branches prostrate to somewhat erect. **Pads or segments:** dark green to dark purple. Flattened, sometimes rounded, 6-15cm long. Easily detached. No tubercles. **Flowers:** yellow to orange-yellow. **Fruit:** fleshy, globular shaped, to 3cm long. Red-purple. Sterile. **Spines:** usually 2-3 spines, 1-3cm long. Brown-yellowish.

**Agricultural and economic impact**

Dangerous to livestock.

Riverina pear (*Opuntia elata*)

**Habit:** shrubby plant with erect branches to 2m tall. **Pads or segments:** glossy green, sometimes with a purple tinge, especially around areoles and margins. Often more than 2cm thick, 5-25cm long. **Flowers:** orange. **Fruit:** club shaped, to 6cm long. Purplish red. **Spines:** spines absent, or 1-3 short spines present at some areoles. Whitish yellow.
No common name (\textit{Opuntia elatior})

\begin{itemize}
  \item \textbf{Habit:} shrubby, forming dense, much branched clumps 5m tall.
  \item \textbf{Pads or segments:} olive green. Oblong shaped, 10-40cm long.
  \item \textbf{Flowers:} yellow-orange, with red stripes.
  \item \textbf{Fruit:} egg shaped. Reddish when ripe.
  \item \textbf{Spines:} 2-8 spines, 2-4cm long. Needle-like. Dark brown.
\end{itemize}

No ‘official’ common name, sometimes called Engelmann pear/prickly pear (\textit{Opuntia engelmannii})

\begin{itemize}
  \item \textbf{Habit:} low shrub to 1.5m tall. Forms dense clumps. Can be confused with \textit{O. robusta} but has a low, creeping habit and pads do not have a milky blue-green appearance.
  \item \textbf{Pads or segments:} green. Flattened, round to egg shaped, 15-20cm long.
  \item \textbf{Flowers:} yellow.
  \item \textbf{Fruit:} fleshy, to 7cm long. Purple. Almost spineless.
  \item \textbf{Spines:} 1-6 spines, 1-4cm long. Yellowish.
\end{itemize}

Indian fig (\textit{Opuntia ficus-indica})

\begin{itemize}
  \item \textbf{Habit:} large shrub/tall tree to 5m tall. Usually with a trunk.
  \item \textbf{Pads or segments:} dull blue-green. Flattened, egg to oblong shape, 20-60cm long.
  \item \textbf{Flowers:} yellow.
  \item \textbf{Fruit:} to 10cm long. Yellow, orange, red, purple.
  \item \textbf{Spines:} spines usually absent, rarely one.
\end{itemize}
Bunny ears, teddy bear cactus, golden bristle cactus (*Opuntia microdasys*)

**Habit:** branched shrub, forming thickets to 1m tall.

**Pads or segments:** green to pale green and velvety. Round to oblong shaped, 6-15cm long. Distinctive clusters of yellow glochids.

**Flowers:** yellow.

**Fruit:** fleshy, globular shaped, to 3cm long. Red-purple. Sterile.

**Spines:** spines usually absent, rarely one.

**Drooping tree pear** (*Opuntia monacantha*)

**Habit:** erect shrub to 2m tall, sometimes with a short trunk. Plant has an obvious drooping appearance.

**Pads or segments:** glossy green. Oblong to egg shaped, thin profile, 10-30cm long.

**Flowers:** yellow or orange-yellow.

**Fruit:** pear shaped, to 7cm long. Red. Spineless.

**Spines:** 1-2 spines, 2-4cm long. Brown to off-white.

*Opuntia polyacantha*
Wheel cactus (Opuntia robusta)

**Appearance**

**Habit:** shrubby/tree-like to 2m tall. Many branches.

**Pads or segments:** blue green. Circular shape, thick profile, to 40cm wide.

**Flowers:** yellow.

**Fruit:** fleshy, globular shaped, to 8cm long. Deep red. Numerous fertile seeds.

**Spines:** 2-12 spines, up to 5cm long. White to pale brown or yellow.

**Agricultural and economic impact**

A large, robust 'prickly pear' type of cactus, ideally suited to much of southern WA, birds spread the seeds. Dangerous to livestock.

No ‘official’ common name, sometimes called chicken dance cactus (Opuntia schickendantzii)

**Agricultural and economic impact**

Can injure livestock, contaminate wool and hides and reduce or prevent grazing.

Common prickly pear (Opuntia stricta)

**Habit:** sprawling/erect shrub, up to 2m tall. Forms thickets.

**Pads or segments:** blue green. Egg or oblong shaped, 10-25cm long.

**Flowers:** yellow.

**Fruit:** fleshy, globular to pear shaped, to 6cm long. Purplish red. Numerous fertile seeds.
**Spines:** in variety stricta spines usually absent, occasionally one on pad. In variety dillenii up to 11 spines, 1.5-4 cm long.

**Velvet pear (Opuntia tomentosa)**

**Habit:** shrubby to treelike, up to 5 m tall. Often with a trunk. Segments and fruits covered in fine hairs, giving a velvety (tomentose) appearance.

**Pads or segments:** oblong to egg shaped, 15-30 cm long.

**Flowers:** orange.

**Fruit:** globular to egg shaped, to 5 cm long. Red.

**Spines:** often spineless, but can have 0-4 spines, 0.5-1.5 cm long. Whitish yellow.

**Cylindropuntia species**

**Coral cactus, boxing glove cactus (Cylindropuntia fulgida var. mamillata)**

**Habit:** erect shrub up to 0.4-0.8 m tall. Deciduous leaves. Rarely flowers/fruit.

**Pads or segments:** green-grey green. Often distorted, with a corrugated (tuberculate) surface, 10-22 cm long, 2-4.5 cm diameter. Often numerous, easily detached small segments.

**Flowers:** deep red.

**Fruit:** inverse cone or oval shaped. Grey-green. Forms long chains. Usually sterile.

**Spines:** 4-15 spines, 0.7-2 cm long, often shorter. Cream to brown (colour variable). White to tan sheath.

**Devil’s rope, rope pear (Cylindropuntia imbricata)**

**Habit:** branched shrub or small tree 1-3 m tall. Often with short trunks. Deciduous leaves.
**Pads or segments:** dull grey-green. 15-40cm long, 3.5-5cm diameter. Large, widely spaced tubercles give a woven, rope like appearance.

**Flowers:** dark pink, magenta.

**Fruit:** fleshy, egg shaped, to 4cm long. Greenish-yellow when ripe (can form chains).

**Spines:** 2-12 spines, 0.8-3cm long. Trunks often covered in spines. Off white-cream. Off white-cream sheath attached.

No common name (*Cylindropuntia kleiniae*)

**Habit:** straggly shrub to 0.5-2.5m tall. Large plants form a trunk. Deciduous leaves. 0.6-1.2cm diameter.

**Pads or segments:** light grey-green. 6-26cm long, 0.6-1.2cm diameter.

**Flowers:** pink-red.

**Fruit:** egg or cylinder shaped.

**Spines:** 1-4 spines, 2-4.5cm long. White to brown. Tan sheath firmly attached.

**Pencil cactus (*Cylindropuntia leptocaulis*)**

**Appearance**

**Habit:** spreading shrub 0.4-1.8m tall. Deciduous leaves.

**Pads or segments:** green-grey green. Very slender, 2-8cm long, 0.3-0.5cm diameter.

**Flowers:** pale to greenish yellow.

**Fruit:** fleshy, egg shaped.

**Spines:** 0-4 spines, 0.5-1.5cm long. Cream to pale yellow.

**Agricultural and economic impact**

A threat to rangelands in particular and known to impale cattle within its native range; also an environmental threat.
Jumping cholla (*Cylindropuntia prolifera*)

**Appearance**

**Habit:** low shrub 0.4-1m tall. Deciduous leaves.

**Pads or segments:** greenish grey. 4-15cm long, 4-5cm diameter. Easily detached. Prominent tubercles.

**Flowers:** rose to magenta.

**Fruit:** top shaped, 2-5cm long. Green. Can form chains. Usually sterile.

**Spines:** 7-11 spines, 1-2cm long. Light to dark brown, interlacing. White to tan sheath firmly attached.

**Agricultural and economic impact**

A serious threat to rangelands in particular as it can invade large areas and impale livestock and workers; also an environmental threat

Hudson pear (white-spined) (*Cylindropuntia rosea*)

**Habit:** low, spreading shrub, 0.5-1m tall. Up to 3m wide. Old plants can develop trunks, but not commonly seen. Deciduous leaves.

**Pads or segments:** grey-pale green. 4.5-26cm long, 1.5-3.5cm diameter. Easily detached. Prominent tubercles.

**Flowers:** pink-red.

**Fruit:** oblong to egg shaped, to 3cm long. Green-yellow green. Sterile hybrid.

**Spines:** 7-14 spines, 1-4cm long. White to light brown. White sheath loosely attached.

Snake cactus (*Cylindropuntia spinosior*)
Appearance

Habit: erect shrub to 1m tall. Often forming patches several metres wide. Similar to *C. prolifera*, but different spine and fruit colour. Deciduous leaves.
Pads or segments: mid grey-green. 10-24cm long, 1.5-3cm diameter. Firmly attached. Prominent tubercles.
Flowers: rose-purple.
Fruit: fleshy, cylindrical, to 4cm long. Yellow, sometimes green.
Spines: 6-24 spines, 0.8-1.5cm long, interlacing. White to grey. White sheath firmly attached.

Agricultural and economic impact

A serious threat to rangelands in particular as it can invade large areas and impale livestock and workers; also an environmental threat.

Hudson pear (brown-spined) (*Cylindropuntia tunicata*)

Habit: low, densely branched shrub 0.3 to 0.6m tall. Deciduous leaves.
Pads or segments: pale grey-green. 10-20cm long, 1.5-3cm diameter. Easily detached. Prominent tubercles.
Flowers: yellowish-brown.
Spines: 4-7 spines, 3-7cm long. Red-brown to pale brown. Brownish sheath loosely attached.

Austrocylindropuntia species

Cane cactus (*Austrocylindropuntia cylindrica*)

Habit: Erect, branching shrub 0.3-1.5m tall. Often forms patches several metres wide. Deciduous leaves to 1cm long.
Pads or segments: dark bluish-green, shiny. Rounded, 15-50cm long, 3-4cm diameter.
Flowers: red, cup shaped.
Fruit: egg to urn shaped, to 4.5cm long. Deep green-yellow green. Can produce chains.
Spines: 2-6 spines, approx 1cm long, lack papery sheath.
No common name (*Austrocylindropuntia subulata*)

**Habit**: branching shrub to 3m tall. Forms patches to 8m wide. Leaves to 12 cm long and these may persist for more than one season.

**Pads or segments**: mid green. Slender, to 50cm long, 4-5cm diameter.

**Flowers**: pink.

**Fruit**: oblong, egg or club shaped to 10cm long. Green. Can produce chains.

**Spines**: 1-4 spines, up to 7cm long, lack papery sheath.
Control options for Opuntia cactus

Biological, cultural and chemical control options can be found below.

- Report prohibited species such as wheel cactus (*Opuntia robusta*) before undertaking control to the Pest and Disease Information Service (PaDIS).
- Herbicides are only effective when cacti are actively growing, that is in warm weather when plants are not under drought stress.
- Spraying cacti in cold weather is not effective.

**Biological control options**

**Cultural control options**

**Grub individual plants.** Ensure that no plant segments are left as they will regenerate new root systems.

**Chemical control options**

**Chemical requirements**

When using any agricultural chemicals please ensure that you always follow instructions on the label and any permit. Users of agricultural chemical products must always strictly comply with the directions on the label and the conditions of any permit. To view permits or product labels go to the Australian Pesticides and Veterinary Medicines Authority website.

**Recommended herbicides**

<p>| Herbicide: Triclopyr (Group I) (various trade names such as Garlon™: see APVMA link) |
|-----------------|---------------------------------|
| <strong>Active ingredient</strong> | 600g/L triclopyr |
| <strong>Amount of product/100L water</strong> | 3.0L |
| <strong>Amount of product/100L diesel</strong> | 1.3L |
| <strong>Surfactant</strong> | spray oil with a water mix is essential |
| <strong>Time of application</strong> | when actively growing (spring or autumn) |</p>
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<thead>
<tr>
<th>Herbicide: Triclopyr (Group I) (various trade names such as Garlon™: see APVMA link)</th>
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<tr>
<td><strong>Remarks</strong></td>
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<td>Thorough coverage required with follow up 6 months post treatment. The mix with diesel will give superior results than the water mix.</td>
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<th>Herbicide: Triclopyr + picloram (Group I) (various trade names such as Access™: see APVMA link)</th>
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<td><strong>Active ingredient</strong></td>
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<td>Thorough coverage required with follow up 6 months post treatment. Access may damage nearby susceptible off target species.</td>
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<td>crushing the plant allows the chemical to penetrate and often gives greater control</td>
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Information provided by the Department of Agriculture and Food WA