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"Shift-on" Sifton Bush (Cassinia sifton) A background and some management techniques

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Considerably large areas of Bywong and Wamboin have been invaded over the last decade by a plant commonly called Sifton Bush, a drought-hardy perennial native shrub. Sifton Bush is also known by other common names, being: Chinese Bush, Chinese Scrub, Chinese Tea Shrub, Sifting Bush, Drooping Cassinia, Tear Shrub and Biddy Bush. It has made considerable ingress in the region, especially over the last 3-4 years. It has not, however, reached its full invasive potential regionally. Sifton Bush is regarded in our region as a *Class 4: Locally controlled weed*, defined as:

"Plants that pose a **potentially serious threat to primary production, the environment or human health,** are widely distributed in an area to which the order applies and are likely to spread in the area or to another area" (**bold** our emphasis).

The management actions associated with Class 4 weeds are:

"The growth of the plant must be managed in a way that reduces its numbers, spread and incidence, and continually stops reproducing. The plant must not be sold, propagated or knowingly distributed".

Sifton bush was first recorded in our region in the 1960's. When Sifton Bush first arrived in Wamboin, it was referred to as *C. arcuata*. The taxonomic status of Sifton Bush was somewhat confused, with some accepting *C. arcuata* as a synonym of *C. sifton*, while others recognised two similar species (*C. sifton* and *C. arcuata*). The latter is now well-described in a revision of *Cassinia* (Orchard A. E. 2017), with *C. arcuata* (common names millet scrub, cough bush and rosemary cassinia) now regarded as a rarer species from Western Australia, South Australia, western Victoria and south-west NSW. Sifton Bush is a pioneering species, well suited to invading and establishing on disturbed/degraded sites and where similar general human and climate-induced disturbances occur, and does so very rapidly. There is a very useful section of the revision paper (Orchard A.E. 2017) that shows the possible early spread of this species from the early 1800's to the 1860's, which was potentially through early goldmining ventures and other rural developments. Despite various references to being invasive of disturbed or degraded circumstances, Sifton Bush has also successfully established and reproduced in moderately dense stands of re-generating native vegetation, both in open situations and in more stable areas of woodland in Wamboin/Bywong.

One reason for the sudden widespread expansion of Sifton Bush in our region is the depletion of ground cover over wide areas during the last drought, providing ideal conditions and thus the opportunity for its rapid spread. This species has not reached its full potential in the region yet, and is still spreading. With the current moist soil conditions, its exponential spread will continue this spring and summer.

Sifton Bush has a massive seed production (up to the millions in fully mature plants) with a viability of 2-4 years, and its seedlings establish most rapidly on bare ground and pastures that have been degraded or lost through drought and/or overgrazing, but also in more stable areas of native vegetation at risk. Sifton Bush can also harbour various invasive feral animal species (e.g. rabbits and foxes), and the (now) not uncommon dense infestations may be a fire hazard.

Needless to say, local land managers/holders have recognised the problems created by this species, and even though a native plant, realise that Sifton Bush has to be managed for the reasons stated above, and under their legal obligations as land managers. It is also worth remembering that badly-infested properties are often less sought after and land and property values can be impacted. It is highly recommended that landholders read the DPI factsheet "Sifton Bush (*Cassinia sifton*)" (see reference at the end of this article). It provides useful information on management and photos of this species at various stages of growth and flowering.

Management

While the above factsheet provides useful information on various means of management, it is worthwhile emphasising the manual management suggestions, as these are relatively easy and "softer" on the environment.

Maintain ground cover

Maintain ground cover at least at 75% cover - the denser the better. Maintain the density of native or exotic pastures and forbs by not overgrazing and, wherever possible, allow perennial grasses to seed. Maintaining ground cover helps by competing with germinating seedlings of Sifton Bush.

Removal of mature (seeding) plants

Mature plants (1 m and taller - usually about 2 years old when seeding) can simply be cut off at ground level, and usually do not re-shoot. If they do, wait until the shoots are up to 150 mm tall and spot spray. Alternatively, cut off at ground level and immediately treat the cut area with Glyphosate.

It is important not to transport or drag seeding or recently seeded plants too far. It is far better to heap in one spot for burning at a later stage or spread a large tarp and lay plants on that so they are kept contained, allowing transport to where they can be piled for disposal. Always cover any mature prunings if the load is moving any distance. All areas surrounding removed mature plants will need to be monitored (potentially for up to 4 years) for any seedlings that emerge.

If plants are seeding, slashing will spread the seed, and seed can also be transported on slashing machinery to un-infested areas. Slashing also cuts higher and shatters the stems, and they probably will reshoot if not immediately spot-sprayed with Glyphosate.

Removal of immature (non-seeding) plants

Learn to identify seedlings and remove all small isolated or scattered plants before they flower and seed. Flowering occurs over an extended period, but generally from October to December in our region, and seed production late summer and autumn. Seedlings take from 2-3 years before they mature and flower. Young plants up to 300 mm tall are easily removed as they occur, and doing so is a very easy process when the soil is moist. Monitoring could and should be implemented immediately so plants do not reach maturity. Foot patrols over your property should be conducted twice per year, and all observed seedlings uprooted. This one action will seriously reduce future infestations, and is the easiest and most efficient means of managing Sifton Bush.

Grazing management of Sifton Bush

Sifton Bush is unpalatable to most grazing animals, so should not be relied on for management purposes.

Ground disturbance

Avoid too much widespread soil disturbance, as this prepares a ready seedbed for new germinants.

Broadscale herbicide spraying

This method should be used with great caution, and only by experienced invasive plant control specialists. Herbicides commonly used for Sifton Bush will destroy or damage surrounding vegetation, and in areas of predominantly native vegetation, could have environmental impacts. The potential for herbicide damage to existing ground cover is high, thus creating patches of bare soil prone to re-infestation. At the very least, professional advice should be sought before implementing broadscale herbicide use.

Conclusion

Sifton Bush is now well-established over wide areas in the local region, and will always be with us. Regular and efficient management is the only way we will keep it under some control.

References

<u>NSW DPI Undated</u>. A factsheet on Sifton Bush. Observed August 2021. Has colour photos. Available at: https://weeds.dpi.nsw.gov.au/Weeds/SiftonBush.

Orchard, A. E. 2017. "A revision of *Cassinia* (Asteraceae: Gnaphalieae) in Australia. 7. *Cassinia* subgenus *Achromolaena*". Australian Systematic Botany published by CSIRO Publishing, available at https://www.publish.csiro.au/sb/sb17033

There is further information on this species available through the internet.