

HEMLOCK

CONIUM MACULATUM

MILTON MUNRO



recently hosted a farmer discussion group on a farm in Pirinoa in the South Wairarapa.

One of the more interesting topics we got onto was toxic weeds in pastures and this led to a good discussion on the likes of ragwort and fireweed, and are they really an issue for stock health and safety (for those interested, the answer is they sure are).

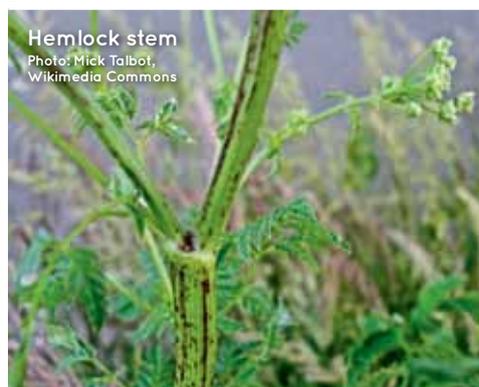
But the farm we were on had its own toxic problem weed: hemlock, a weed found all over New Zealand. It's native to Europe and especially common in the Mediterranean but has been introduced to most of Asia, North America, Australia and New Zealand.

Hemlock is a member of the Apiaceae family of plants, otherwise known as the carrot or parsley family, so its cousins include carrots, parsnips, parsley, celery and herbs such as cumin, caraway, fennel and dill.

But unlike its many delicious and delectable cousins, hemlock is not one for the dinner table as it is particularly toxic to both livestock and humans. An adult human only needs to ingest 6-8 leaves of hemlock for it to be fatal - the poison that the famous Greek philosopher Socrates took to end his life was an infusion of hemlock leaves.

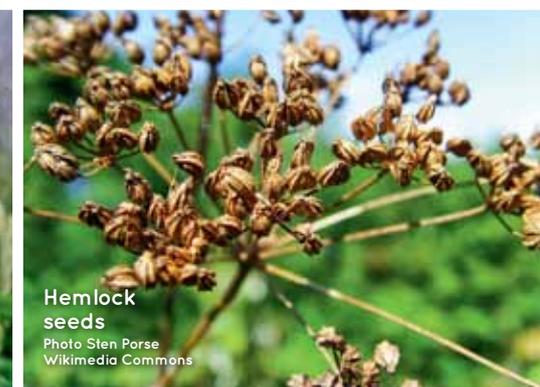
Hemlock-related deaths amongst animals tend to be rare. My son suggested it's because animals are smarter than us, but I suspect they just don't like the taste or smell - maybe we are both right - but even small amounts of hemlock in the diet can lead to birth defects and abortions in animals.

Hemlock is biennial (its lifecycle is over two years). It starts by germinating in early spring and then rapidly forms a large rosette of finely divided, lacy leaves that look fern-like and can grow up to 50cm in length. During its second year it produces a long hollow stem 1.5 - 2.5 metres tall that often has red or purple blotches or streaks over the lower parts of it. At the



Hemlock stem

Photo: Mick Talbot, Wikimedia Commons



Hemlock seeds

Photo: Sien Porse, Wikimedia Commons

end of the primary stems it produces bunches of small white flowers.

Hemlock is a prolific seeder and these seeds can easily be carried by water, machinery or stock.

When hemlock is crushed it produces a foul odour (this is what discourages most animals), that some people describe as being very similar to parsnips but I find this hard to swallow. I've crushed hemlock before and it doesn't smell like parsnips; to me, it's sort of a nasty chemical smell, not a sweet delicious parsnip. Parsnip and I have a bit of a thing - I think it's a Southland thing!

CONTROLLING HEMLOCK

Hemlock is a bit of a pig to manage. For the best success you need to start control early by either grubbing it out (remember to get it all out, especially the roots) or spraying it out.

The best spraying option is to use a product like 2,4D or Tordon PastureBoss and spot spray the offending plants. The best control will come from targeting the small rosettes - trying to spray out the

larger, more mature plants will require more chemicals and less chance of success. The most important thing to remember with spraying is that once the plant has been sprayed it becomes palatable to stock but it maintains its toxicity for some time afterwards, so if spraying remember to let the plants die right down before reintroducing stock into the paddock. ■

MILTON MUNRO is a soil and plant scientist for rural supply company PGG Wrightson. He looks at common pasture weeds you'll find on your block and how to deal with them.

DO YOU NEED HELP WITH A WEED PROBLEM?

If anyone has a request for a particular weed they would like to know more about please don't hesitate to let Milton know: mmunro@pggwrightson.co.nz