

Unintended Consequences

by Paul Martin, Director, Rainbow & Brown



One of my more eccentric hobbies is spotting examples of unintended consequences; that's an action or a law that results in an unexpected and usually undesirable outcome. It happens in politics all the time.

I collect examples of these the way some people collect wines, and for much the same reason – they nearly always improve with age, and they're fun to share with a few friends.

I particularly enjoy *perverse* unintended consequences (PUC's), which doesn't mean anything kinky; it just means that the consequence of an action is not merely unintended, it's the *exact opposite* of what was intended!

Consider the USA's Endangered Species Act, which requires landowners discovering an endangered species habitat on their property to not only protect and preserve that habitat *at their own expense*, but to not use that portion of land for any other purpose! And the perverse unintended consequence is, of course, that when any sensible farmer comes across a rare Warbling Blue Tit's nesting site right in the middle of his best paddock, he has a quick look around and then kills the bloody things as fast as he can.

Other classic examples include rent control laws in large cities, which actually *reduce* both the quality and availability of rental properties. Then there's gun control laws, which in several celebrated examples appear to have *increased* the rate of gun crimes. And the tougher drink-driving penalties introduced in the USA in the 1980's ... which didn't actually reduce drunken driving as hoped, but did increase the number of hit-and-run's quite a bit (it being now too expensive for drunks to stick around after an accident).

Another favourite is the case of the ship Exxon Valdez. When it spilled 11 million gallons of oil in Prince William Sound, Alaska, the Exxon company was ordered to spend US \$2.2 billion cleaning up the mess. This included laborious hand scrubbing of many thousands of rocks on the shoreline. The fun bit (and there always is a fun side) was that the few sections of rocky shoreline that were *not* cleaned up subsequently returned to their pristine natural state faster than the many miles that had been hand scrubbed! Something to do with the cleaning process having also killed vital natural marine micro-organisms among the rocks, if I recall right. A brilliant PUC!

Closer to home, there was Boutros Boutros-Clark's "right to roam" nonsense. When *She Who Must Be*

Obeeyed started raving about it a few years ago, I was one of a number of lake-edge homeowners near Rotorua. Previously, although we had exclusive riparian rights to the water's edge (i.e. no Queen's Chain), we had all routinely permitted reasonable public access across our land. But when *She's* deranged leftie followers started to turn up and *demand* access as their 'right', we closed the place down. When a government suspends private property rights you are heading down a path that leads to Zimbabwe.

And just recently there have been two very interesting new examples of perverse unintended consequences.

In Newcastle, Australia, owners of a row of about six run-down Victorian era terrace houses were slapped with a heritage order by the local authority, preventing them from demolishing the houses, and from modifying or modernising them in any meaningful way. All that is permitted is strictly limited 'period' restoration, using authentic original materials and fixtures. This has of course actually made renovation so expensive as to be impractical; the houses could not be sold or rented for enough to ever recover the cost. So the owners now have only one course of action – to allow the buildings to deteriorate until they are beyond repair and then have to be demolished on safety grounds.

And as a hilarious post-script to that story, the owners' spokesman showed an example of a local Federation era (c. 1900) house, hit with a similar heritage order issued by the same heritage officer: no modifications allowed, only certain colours of paint permitted, etc. But this house was merely a very convincing modern replica, and is actually only six years old!

And finally, from just this past month, the OECD has been questioning the very trendy shift towards using biofuels. It appears that when all the indirect costs and processes are taken into account (e.g. subsidised biofuel production results in less food production, which increases food prices), ethanol and other biofuels now appear to be more expensive and have a higher environmental impact than petroleum fuels! An OECD study now questions whether "biofuels offer a cure that is worse than the disease they seek to heal."

I'll put these new classic PUC's down, in my Cellar of the Absurd. I'm sure they'll seem even sillier after they've matured for a few years.

IN THIS ISSUE:

- **TWO NEW PRODUCTS**
 - 'BUCKSHOT' - granular herbicide for direct spot application
 - 'RANGER' - controls buttercups & docks in pasture
- **ALSO INSIDE:**
 - GLYPHOSATE - the Amazing 'Claytons' Sale!
 - Not much about Climate Change

FULL PRODUCT RANGE:

Details, sizes & prices

Available from 15th October



Buckshot™

Granular herbicide for direct spot application

Buckshot is the handy, safe and inexpensive way to control scattered broadleaf weeds and brushweeds in pasture.

Carry it on the bike or tractor, or in the ute, so you can hit those “targets of opportunity” weeds whenever you spot them. That’s the great thing; you can deal to weeds in just a moment while you’re actually doing some other job.

Buckshot is applied as a dry granule; no mixing or preparation is required. So it’s always ready to use.

Apply by hand, by pogo stick applicator, or by applicator bottle (including the ever-popular old detergent bottle, etc).

Contains 20g/kg picloram as the active ingredient. Picloram is one of the actives in our popular spray product GrassMate. Buckshot is a dry granule which carries the active ingredient into the soil, where it is absorbed into the roots and then transported up into all parts of the plant. Target weeds will visibly wilt fast and begin to die in just days.

Buckshot will not harm pasture grasses, but it does damage clover. However, as it is applied only locally to the individual target weed, this is not really a problem.

Controls ragwort, nodding thistle, docks, gorse, broom, blackberry, tutu, tutsan, matagouri, fennel, inkweed, lupin, goat’s rue, Mexican devil weed, hemlock, heath, Himalayan honeysuckle, sweet brier, St John’s wort, woolly nightshade, and smaller boxthorn & barberry.

For ragwort, nodding thistle and docks, you apply 2g of Buckshot direct onto the crushed centre of the plant. For brushweeds, sprinkle 30-55g (depending on species) over the top of the plant, out to 30cm from the dripline to get all the roots.

Apply anytime of the year when target weeds are growing and there’s enough moisture to carry the Buckshot down into the soil. Avoid use on peat or heavy clay soils, which can lock up the active ingredient.



PRICES INCL GST & DELIVERY:

5KG...\$65

10KG...\$110

20KG...\$200

You do NOT require an Approved Handler certificate to purchase or use Buckshot.

Available from 15th October



RANGER

Herbicide for control of buttercups and docks in pasture.

Ranger is a foliar spray herbicide for use in pasture and cereal crops. It can also be used in conservation tillage.

Contains 750g/kg thifensulfuron-methyl as the active ingredient. It's a very low-toxicity product, and is non-hormonal and non-volatile.

The herbicide spray is absorbed through the leaves, and works by preventing new growth, rather than by "poisoning" the target weed. So while you will see growth of the susceptible weeds stop pretty much immediately, it will take a month or 6 weeks for the plant to actually die.

The ideal time for application is in the spring during the period of most active growth. Best results will occur if pastures are grazed out and allowed to freshen up just prior to application.

Some reduction in pasture vigour may occur after application, affecting ryegrass and clover, but this will be temporary. However, if you spray when pasture is stressed and not growing well, you risk more serious pasture suppression.

You can apply Ranger by air or ground boom, as well as by spot spraying. The use rate is just 20g/Ha, so a 100g pack of Ranger will treat 5 hectares. The pack comes with a scoop and a measuring cylinder, as well as an instruction leaflet.

The addition of a wetter/penetrant is not necessary when selectively spraying docks and buttercups. Do not graze treated areas for 7 days.

Ranger is also excellent when mixed with glyphosate when spraying out prior to pasture renewal and cropping.



PRICES INCL GST & DELIVERY:

100g PACK...\$95

You do NOT require an Approved Handler certificate to purchase or use Ranger.

Glyphosate: The sale you have when you're not having a sale!

Glyphosate raw materials costs have, as we predicted in our last newsletter, been going absolutely crazy. And retail prices for glyphosate herbicides have been forced up, in NZ and everywhere else.

So if you're needing glyphosate in the next two or three months, or even the next six months, you'd better read on. Especially if you want 200L or more.

What's Going On?

The surge in raw material costs has been caused by three things. First, massive extra demand for glyphosate due to 12 million acres of extra maize production in North America, for biofuel production. Second, China (world's largest producer of glyphosate acid technical concentrate) has removed a substantial export subsidy it was paying to its manufacturers. And third, the NZ dollar dived at just the

wrong moment, at least for those buying chemicals offshore.

Result?

The NZ\$ cost of imported glyphosate acid raw material has gone up by 35% in the past 2 months.

Effect on NZ Prices.

In the last month, NZ glyphosate producers/retailers have been putting their prices up. One nationwide retailer has increased its Glyphosate 360g/L price for 20L by nearly 25%, and the price of a 200L has risen almost \$250, to \$1400! Several other brands are suffering similar increases, and presumably the rest will all follow as they run out of 'old' stock.

What's worse, given what's going on internationally, this doesn't look like a short-term glitch ... the price of glyphosate is predicted to keep rising well into next year.

Our Gamble.

In a moment of what seemed at the time to be fiscal insanity, we purchased a much larger than normal consignment of materials just in time to partly minimise the pain, i.e. before the subsidy came off and before the dollar duck-dived. So we're not hurting as much as we might have been. At least not yet! And that means we are in the happy position of being able to have minimal or no price rises for Glyphosate: 20L stays the same but 200L has to go up just a bit. So while we aren't having a sale, we actually are having one, if you see what I mean.

So don't get caught paying \$25 or more too much for 20L of glyphosate, or as much as \$200 too much for 200L. Go for Rainbow & Brown glyphosate ... it's cheaper, even if it's not really on sale!



Here's our glyphosate "sale" prices, effective 1st October 2007:

	5L	10L	20L	100L	200L
Glyphosate 360g/L	\$60	\$90	\$138	\$680	\$1250
Glyphosate 450g/L	\$70	\$100	\$165	\$795	\$1450

These prices include GST and delivery
(orders over 60L normally delivered to a nearby freight depot).

California Girls



The Beach Boys said California Girls are different (and went on to say that they wish all girls could be California girls).

Pity you can't say the same about California thistles! They're different, all right, but I don't imagine anyone would wish thistles all could be California thistles.

Oddly enough, some of them actually are girls! A patch of Calis in a paddock are usually all actually exactly the same plant, connected by the one massive root system. And that plant will be either a girl, or a bloke. Female or male.

Here's a collection of bits 'n pieces about Calis, some of which might help you to get on top of this pesky thistle.

- Calis are perennial, in spite of the fact that the above-ground bits die down in winter.
- Because patches tend to be either all male or all female, very little fertile seed is produced. It's rare for Cali thistles seedlings to grow in pasture.
- Herbicide control can be patchy, due to the wide-reaching root system.
- Pasture-friendly spraying can be done with MCPA or MCPB in early summer, and MCPA plus clopyralid in autumn. We've also

had good reports with Grassmate at 2L/Ha. It's best to graze heavily just before treatment, to minimise clover damage.

- Best time to spray is at the hard ball stage, which is just before the flower bud bursts. That's when the maximum downward movement of sap (and therefore herbicide) occurs, so killing as much of the root system as possible.
- You can encourage a uniform hard ball stage by topping Calis early in the season; they regrow at the same rate and so all get hard balls together (ouch!)
- Whatever you spray with, you must follow up the next early summer to spot spray all new aerial shoots, otherwise the partially dead underground sections of the plant will be re-energised and all your good work will be undone.
- Excellent (and amazingly inexpensive) results can be had using a weed wiper and MSF600 and glyphosate, but be sure to graze hard just before wiping, to obtain maximum height difference between pasture & thistles, preventing accidental pasture damage.

Glyphosate 360g/L? Or 450g/L?

**It's one of the most frequently-asked questions:
"Which version of glyphosate is the best value?"**

They both contain exactly the same active ingredient, but at different strengths.

The 450g/L formulation contains 25% more active glyphosate per litre. But it also goes 25% further, because the application rates of the two products are adjusted to account for the different strength.

Put simply, a 20L of Glyphosate 450 is the same as 25L of Glyphosate 360. Makes the same amount of spray and covers the same area.

For example, say you were spraying with 'regular' Glyphosate 360 at 4L/Ha. Then to cover 5 hectares you'd use 20 litres.

But with Glyphosate 450 you'd only apply 3.2L per hectare, so for 5 hectares you'd use only 16 litres.

Proof:

- 4.0L x 360g/L = 1440g active applied per hectare
- 3.2L x 450g/L = 1440g active applied per hectare
(i.e. same amount applied either way)

Cost Comparison:

- 20L of Glyphosate 360 costs \$138.
- 16L of Glyphosate 450 costs \$132.

It's therefore \$6 cheaper to use the Glyphosate 450.

Of course, you can't actually buy 16L of Glyphosate 450 ... you'd have to buy 20L and have 4L left over for next time. But I'm sure you get the point.

Recommend us to a friend?

Thanks!

If you recommend our products to a friend or neighbour, or even to an in-law, and they mention your name when they first order from us, we will apply a \$10 discount to your next order for \$130 or more.

You don't have to remind us; the \$10 discount is noted straight onto your account when your friend or mother-in-law orders, and we will automatically apply it to your next order. You'll get the discount even if you didn't know your friend had ordered yet.

Word-of-mouth recommendation is the best form of advertising, and we want to show our appreciation of your faith in us. So thanks a million! Well, perhaps not a million ... but thanks 10 bucks, anyway!

By the way, our website at www.rainbowbrown.co.nz is a great place to suggest to your friend to check us out. All the products and prices are there, and you can now also download the current newsletter from the website as well.

PRODUCT	COMMENTS	SIZES & PRICES
<p>GLYPHOSATE 360</p> <p>360g/L GLYPHOSATE AS THE ISOPROPYLAMINE SALT</p>  <p>ACVM No P5441</p>	<p>Glyphosate is the world's most popular and trusted herbicide.</p> <ul style="list-style-type: none"> • Safe to use, fast acting, non-toxic & economical. • No residual effect in soil; drill new seed in 2 days. • Withhold stock 2 days to allow penetration through plant. • Use 1L/100L (hand) or 3-5L/ha (pasture). • Add SprayWetter penetrant for best results. 	<p>5L.....\$60</p> <p>10L.....\$90</p> <p>20L.....\$138</p> <p>100L.....\$680</p> <p>200L.....\$1250</p>
<p>GLYPHOSATE 450</p> <p>450g/L GLYPHOSATE AS THE ISOPROPYLAMINE SALT</p>  <p>ACVM No P7223</p>	<p>More concentrated for maximum economy</p> <ul style="list-style-type: none"> • Same user-friendly benefits as Glyphosate 360 (above). • 25% stronger so goes 25% further (20L = 25L of the 360g/L product). • Use 800ml/100L (hand) or 2.4-4L/ha (pasture). • Add SprayWetter penetrant for best results. 	<p>5L.....\$70</p> <p>10L.....\$100</p> <p>20L.....\$165</p> <p>100L.....\$795</p> <p>200L.....\$1450</p>
<p>MSF600 Gorse & Brush Spray</p> <p>600g/kg METSULFURON-METHYL</p>  <p>ACVM No P7027</p>	<p>The low-cost, proven choice for gorse and brushweeds.</p> <ul style="list-style-type: none"> • Water-dispersible granule, easily soluble. • Safe to handle, non-toxic to humans and animals. • Gorse, blackberry, manuka, scrub, bracken, ragwort & thistles. • For gorse use 20g/100L (hand), 500g/ha (aerial). • Add SuperWetter penetrant for best results. 	<p>200g\$55</p> <p>500g\$78</p> <p>1kg\$125</p>
<p>GRASSMATE</p> <p>300g/L TRICLOPYR AS THE BUTOXYETHYL ESTER plus 100g/L PICLORAM AS THE AMINE SALT in the form of an emulsifiable concentrate</p>  <p>ACVM No P7417</p>	<p>Grass friendly control of brushweeds and broadleaf weeds in pasture.</p> <ul style="list-style-type: none"> • Kills gorse, broom, blackberry, tutus, sweet briar, matagouri & lupins. • Also controls broadleaf weeds, including ragwort, thistles, fennel, nettle and inkweed. • Does not harm common pasture grasses. • Stump swab barberry, Old Man's Beard, woolly nightshade, wattle, willow. • Add SuperWetter penetrant for year-round spraying. • 10-12L/ha for brush species, and 250-300ml/100L handgun (gorse rate) 	<p>2L.....\$130</p> <p>5L.....\$245</p> <p>10L.....\$450</p> <p>20L.....\$850</p> <p>100L.....\$3650</p>



PRODUCT	COMMENTS	SIZES & PRICES
<p>BUCKSHOT</p> <p>20g/kg PICLORAM GRANULES</p>  <p>ACVM No 7717</p>	<p>Granular herbicide for direct spot application.</p> <ul style="list-style-type: none"> • Controls ragwort, nodding thistle, gorse, inkweed, broom, docks, hemlock, sweet brier, woolly nightshade, tutsan, blackberry. • Convenient and safe; apply by hand, by pogo stick applicator, or by applicator bottle. • Carry Buckshot on the bike, tractor or ute for opportunistic spot weed control. • Use 2g per plant or 30-55g/sq.m 	<p>5kg\$65</p> <p>10kg\$110</p> <p>20kg\$200</p>
<p>RANGER</p> <p>750g/kg THIFENSULFURON-METHYL GRANULES</p>  <p>ACVM No 7668</p>	<p>Selective herbicide for use in pasture, wheat barley and oats.</p> <ul style="list-style-type: none"> • Controls buttercups (annual, creeping and giant) and docks. • Scoop and measuring cylinder included. • Use at 20g/Ha, so 100g pack will treat 5 hectares. 	<p>100g\$95</p>
<p>TRICLO</p> <p>600g/L TRICLOPYR AS THE BUTOXYETHYL ESTER</p>  <p>ACVM No P7189</p>	<p>Controls broadleaf & brush weeds without pasture damage.</p> <ul style="list-style-type: none"> • Blackberry, broom, gorse, lupin, tutus, fennel, sweet brier, Old Man's Beard, plus most broadleaf weeds in pasture. • Apply in warmer months during active growing conditions. • Add SuperWetter for gorse and all woody species. • Brush weeds use 10L/ha or up to 300ml/100L by hand. • Broadleaf weeds in pasture use 2L/ha or 200ml/100L. 	<p>2L.....\$120</p> <p>5L.....\$225</p> <p>10L.....\$385</p> <p>20L.....\$675</p>
<p>SUPERWETTER</p> <p>100% ORGANOSILICONE WETTER-PENETRANT</p> 	<p>Boost spray performance on woody & hard-to-kill species</p> <ul style="list-style-type: none"> • Assists penetration, especially into stressed and dusty plants. • Reduces rain risk period, normally to under an hour. • Boosts herbicide performance by aiding in translocation. • Use at 100ml/100L, or 500ml-2L/ha depending on species. 	<p>2L.....\$55</p> <p>5L.....\$115</p> <p>20L.....\$450</p>
<p>SPRAYWETTER</p> <p>100% NON-IONIC SURFACTANT WETTER-PENETRANT</p> 	<p>Maximises herbicide performance in all situations</p> <ul style="list-style-type: none"> • Permits faster & more thorough penetration into plant. • Reduces rain risk period, normally to under an hour. • Use when herbicide directions do NOT specify a SuperWetter. • Use at 100ml/100L, or 500ml-2L/ha depending on species. 	<p>5L.....\$55</p> <p>10L.....\$105</p> <p>20L.....\$200</p>

THE BACK PAGE

• Rainbow & Brown

Rainbow & Brown Ltd is a NZ owned company. Our factory and office is in Rotorua. We're now in our 9th year of operation, and have been growing strongly every year. We have customers all over New Zealand, including farmers, horticulturalists, spray contractors, nurseries, commercial and private gardeners, and many other businesses. Our products are sold direct, with no retailers, agents or middlemen involved, which is why our prices are so attractive ... it is effectively the "wholesale" price, direct from the manufacturer.

• People

The directors of Rainbow & Brown are Paul & Chris Martin, who've both been involved in the NZ agricultural chemicals business for nearly 20 years. Both are actively involved in running and building the business. If you phone us, your most likely contact will be Rachael, our office manager. If you call in at the factory, you'll also meet Clinton, the factory manager. We're just a small family, but a happy one.

• Ordering

You can order anytime by phone, online at rainbowbrown.co.nz, or by fax, e-mail or by letter. If you call on the freephone number, you may at times get an answering machine. That means we're already on the phone, or doing something else. Or it may be after office hours (see below). Please just leave your name and number, and we'll soon call you back. Or if we've already got all your details, just leave your order (*with your name and phone number*) on the machine.

• Delivery

We send your order within 24 hours. Delivery will usually take between 1 and 4 days. If it hasn't arrived after that time, *call us* immediately so we can track it down for you. Delivery of orders of 60 litres or less will normally be to your door, including rural delivery addresses. However, delivery of larger orders will be to the nearby freight depot or drop-off point we will arrange with you when you place your order.

• Factory & Office Hours

If you want to collect your order from our Rotorua factory, you're welcome. It's at 68A Tallyho Street. Open hours are 8.30 to 4.30, Monday to Friday.

• Payment

We send your invoice by mail, the day we send your order, so you'll know when it was shipped. Payment is due on 20th following month, and you can send a cheque or use direct payment to a/c No: 123155-0066374-00. The bank account number is also on both your invoice and your statement. We send statements out in the first week of each month.

• Website

Our website is at www.rainbowbrown.co.nz. There you'll find full details of all our products, as well as labels, Safety Data Sheets (SDS), and a small library of useful reference articles about things like Chemical Safety, Calculating Application Rates, Comparing Prices, etc. You can use the website to order direct from us, or to send us a message. Please take a look and if you have any suggestions for improvement let us know.



• Happy Spring!



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