

Welland Catchment Allotment & Garden survey



What is the problem?

Raw water destined for drinking water must adhere to the **drinking water standards**; an individual pesticide must not **exceed 0.1µg/l (0.1ppb)**. This is an extremely small amount and can be equated to:

- 1 stem of hay in 111,000 bales
- 1 grain of wheat in 390 tonnes
- 1 second in 320 years
- 1p in £100million

All users of pesticides and nutrients, no matter in how small amounts, **play a role in protecting raw water quality**. We all have an obligation to do our best to protect our local water environment.

Project objective:

A survey was carried out of gardeners and allotment holders in the Welland river catchment. The **aim of the survey** was to **better understand the challenges facing allotmenters and gardeners** in terms of weed, pest and disease control plus assess current knowledge levels regarding best practice chemical handling, use and disposal.

Method

The 2021 online survey ran from February - May and closed with a total of **151 responses**.

Results

Weeds

Bindweed, couch grass, mares tail were the most commonly cited problem weeds with 24%, 15% and 14% of the respondents citing these respectively. **Dandelions (9%), nettles (6%) and brambles (6%)** were also cited.

In terms of controlling weeds, the most common method was **hoeing** followed by **digging them out** and the **use of herbicides such as glyphosate**.



Figure 1 - Word clouds to show the answers to: What are your most common weeds, pests & diseases?



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Pests

The most commonly cited pests to control in the garden were **slugs, snails, birds and whitefly**.

In terms of **slug control**, 18% of respondents used a **slug pellet** for control, with **12% of respondents** stating specifically that they used an *'organic slug pellet'*.

Hand removal was cited by 17% of respondents as a slug control method, with **9% encouraging natural predators** such as frogs and hedgehogs and **10% of respondents using slug traps** to assess slug numbers and then remove. A **further 7% removed debris** to reduce slug feeding sources.

Overall 16% of respondents used some kind of **natural barrier to impede slug movement**. 5% made sure that they only planted out plants that were past the vulnerable growth stage to slugs or planted extra/sacrificial plants. In total **5% of respondents did not control slugs** saying *'they lived with it'*, they *'leave them alone for frogs/birds/hedgehogs'* or *'Generally I leave them alone, they leave enough for us to enjoy'*.

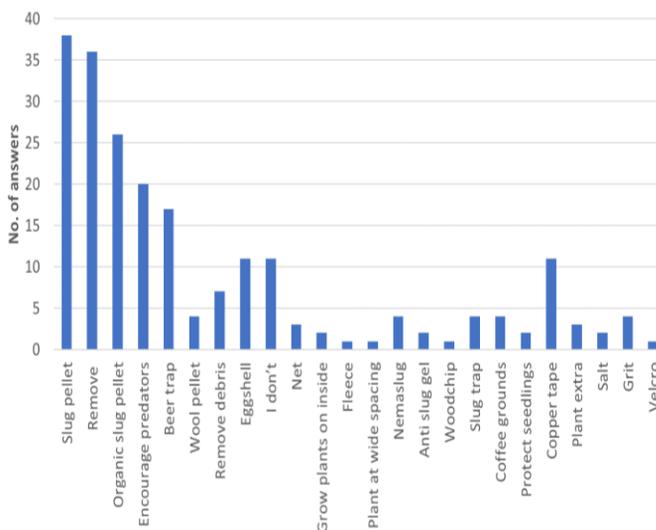


Figure 2 - Graph to show answers to the question – 'How do you control slugs in your garden or allotment?'

Disease

In terms of diseases **35% of respondents** said they had **'no disease'** with the most common diseases being **blight (25%), blackspot (13%), rust (8%) and mildew (8%)**.

How to decide on using a chemical

Respondents were reluctant to use chemicals to control weeds, pests and diseases; just **under half of respondents were organic** (44.37%), with a further 42% using chemicals *'irregularly, as a last resort approach'*. Only around 3% of respondents used chemicals as a *'standard precaution'*.

Do you know what you are buying?

Around **40% of respondents were 'familiar with various active ingredients in the garden chemicals they purchased and this affected their purchasing'** for example using the water friendly and organic ferric phosphate compared to metaldehyde slug pellet. Just over 17% of respondents were *'not familiar with the term active ingredient'* suggesting maybe a smaller number of respondents were **unaware what was in the purchased product**.

Chemical container disposal

When asked about how to **dispose of chemical containers**, **25% of respondents** said that they *'rinsed out with water and added the washings to the final spray solution, before recycling'* which would be considered **best practice** (if the plastic can be recycled). Around **21% of respondents** said that they **rinsed out with water before pouring it away and recycling**. This is potentially worrying as they could be pouring the excess water/spray washings down a drain. Around **29% of respondents specified 'Other'** to this question. Answers included: *'I don't use any'* (the majority of comments), *'I share bulk containers so haven't ran out yet'*, *'I re-use containers'*, *'I follow Allotment Society Committee advice on disposal'* or *'I put in the household bin'*.

Chemical disposal

Most respondents (56%) said that they got rid of any chemical at a **Council household waste site** with 3.1% saying they poured the chemical onto land or soil surface. A **very small number of respondents (~4%)** said that they **poured the chemical down an outside drain** – this may have connectivity to the water system and could lead to pollution. Around **37% of respondents** said that they did *'Other'* options including: *not using any so not needing to dispose of any chemicals (majority of the comments), putting in the household bin, only mixing up the right amount so not having any left over and following instructions for disposal on the chemical packet.*

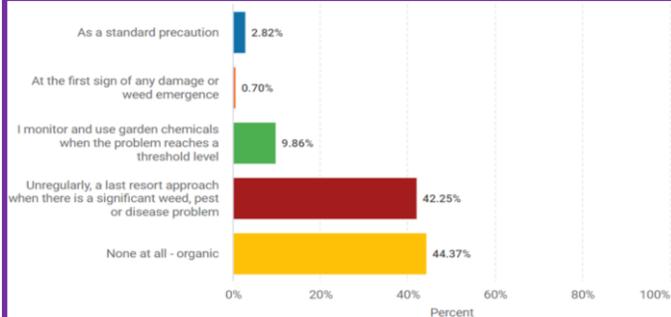


Figure 3. Graph to show answers to: 'How do you decide on whether to use a garden chemical or not?'

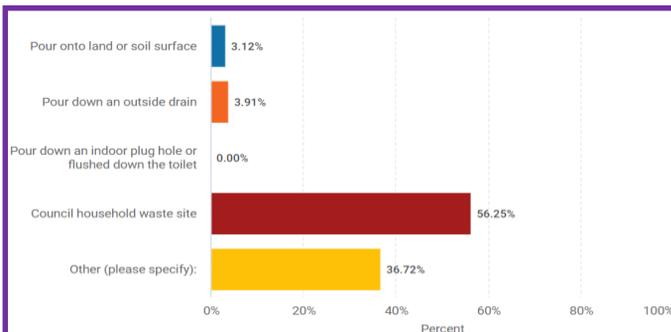


Figure 4. Graph to show answers to: 'How do you dispose of any unwanted chemicals?'

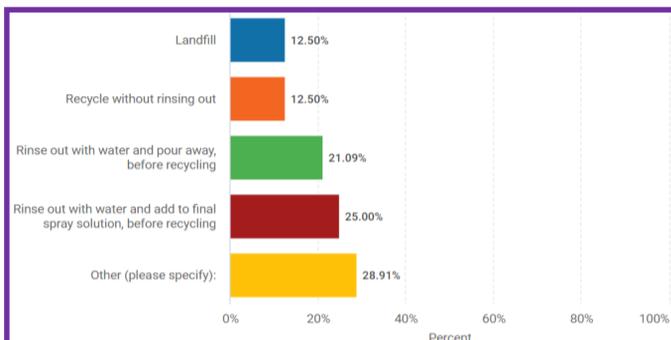


Figure 5. Graph to show answers to: 'How do you dispose of any used garden chemical containers?'

Key takeaway findings

Many gardeners and allotment holders are either organic or are doing their very best to reduce their chemical usage.

Knowledge of how to dispose of chemicals and there containers is good. Just make sure any **chemical or chemical washings are never poured down an inside or outside drain** and instead are **diluted with water and sprayed out onto sacrificial land** e.g. a corner of the vegetable plot away from any drains or watercourses.

Anglian Water will seek to work with local **Councils** to arrange a **Garden and Allotment Chemical Amnesty** helping with old/unwanted chemical disposal.



Being careful with water is an all-year-round challenge. Not just when there's a dry spell.

We love every drop, come rain or shine.

Find out more at AnglianWater.co.uk/farming

