



# Glyphosate and its role in an integrated approach to weed management

JOHN MOVERLEY

- What does the science on pesticides including glyphosate really tell us and what is the process for authorisation?
- What is the current state of play?
- What is involved in an integrated approach?
- Where do we go from here?

I hope as I present this, it makes some logical sense but we will see!

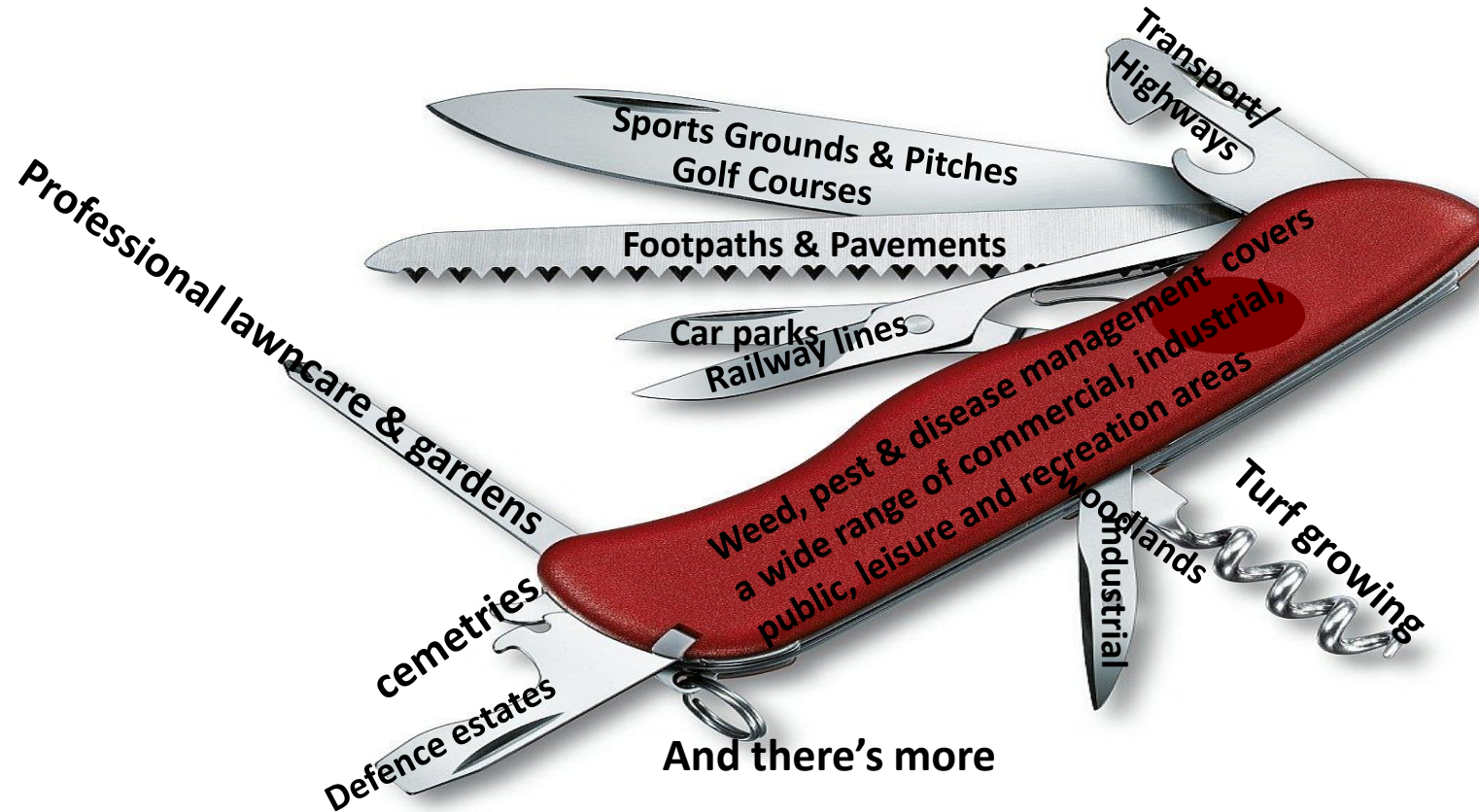


# INTRODUCTION TO THE AMENITY FORUM

- Voluntary Initiative created in its present form ten years ago when the Sustainable Use Directive was implemented in the UK
- The UK Action Plan (NAP) relied heavily on voluntary action by the sector to promote best practice & meet targets set in the plan
- I am the Independent Chairman who seeks to gain participation by the sector and report to Government on progress



# The Amenity Sector - What it is

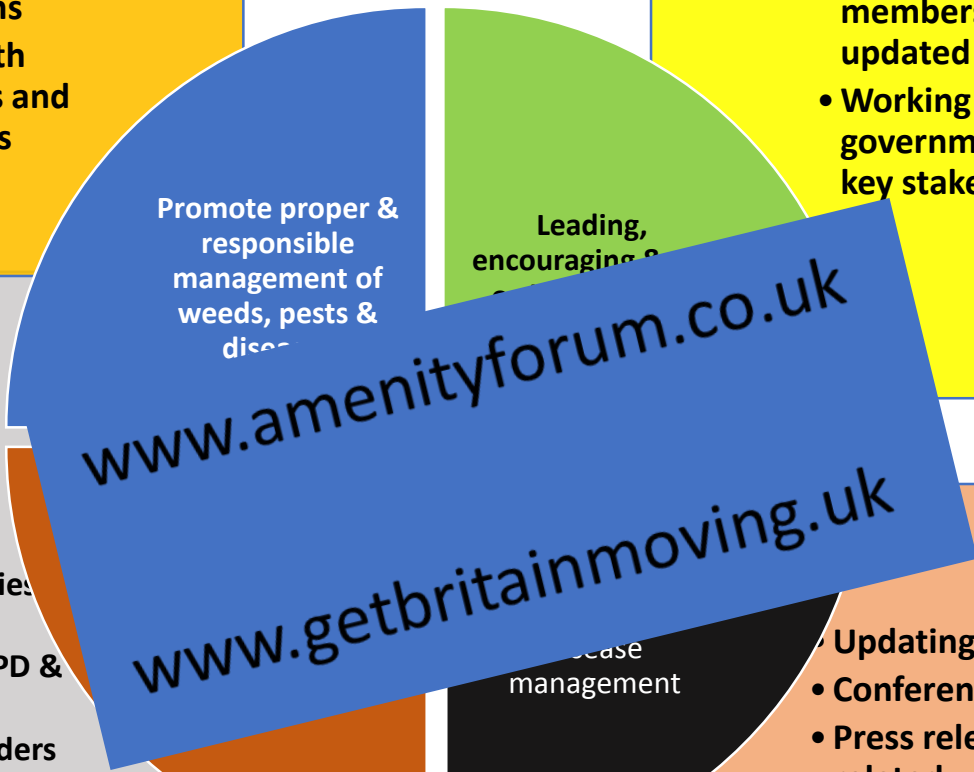


IMPACTING ON EVERY UK CITIZEN EVERY DAY

SEEKING TO CREATE SAFE, HEALTHY PUBLIC SPACES FIT FOR PURPOSE

- Articles
- Press
- External presentations
- Engaging with key agencies and on key issues

- Ten Golden Rules
- Guidance Notes
- Keeping members updated
- Working with government & key stakeholders



Promote proper & responsible management of weeds, pests & diseases

Leading, encouraging & supporting

Case management

- Engaging with awarding & accreditation bodies
- Promoting participation in CPD & other training
- Advising stakeholders & indeed all of standards to be sought
- Promoting Amenity Assured & link to other recognised CPD schemes

- Updating events
- Conference
- Press releases & related
- Get Moving
- Amenity Matters on going campaign





# PESTICIDES

With a particular focus on glyphosate

# Legislation

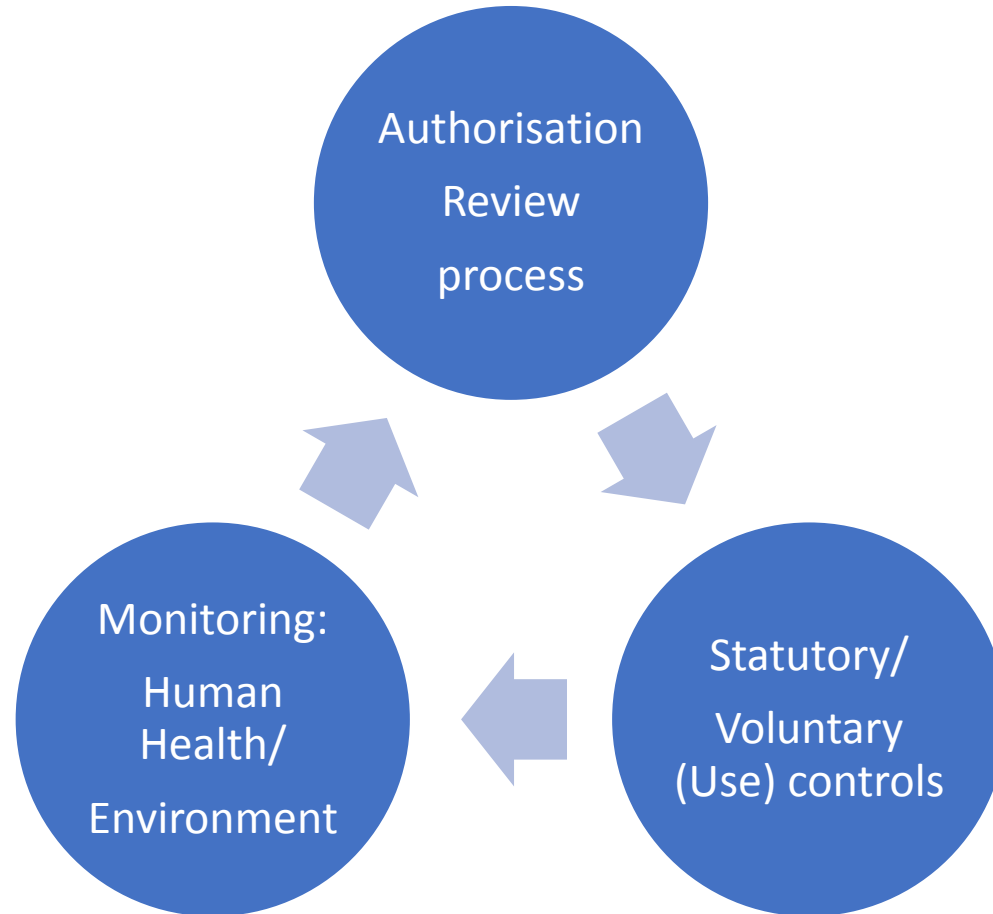


Authorisation of pesticides

Monitoring of human health and the  
environment

Sustainable use

# THE APPROVAL PROCESS FOR PESTICIDES





How safe are chemicals used for weed control compared to other every day items?



# Sustainable Use



Reasonable Precautions

Protecting Water

Integrated Pest Management

Minimising use



# A Simple Molecule...

- Glycine is a naturally occurring amino acid
- It is the simplest amino acid
- It is one of the most abundant amino acids in the body, playing a key role in creating amino acid neurotransmitters
- Colourless, sweet-tasting crystals

A phosphoryl group is added to glycine to make glyphosate.

Phosphorylation of amino acids occurs very widely in nature.



Phosphorylation

Glyphosate  
[N-(phosphonomethyl) glycine]

WHY IS THERE  
PRESSURE  
AGAINST  
GLYPHOSATE  
PRODUCTS

Assessment undertaken by  
Member States, the European  
Chemicals Agency (ECHA) and the  
European Food Safety Authority  
(EFSA)



# VOTE OF STANDING COMMITTEE

- On 12 December 2017, the Commission renewed the approval of glyphosate for 5 years, following support by a qualified majority of Member States in an Appeal Committee held on 27 November 2017
- Therefore, glyphosate can be used as an active substance in Plant Protection Products (PPPs), until 15 December 2022, subject to each PPP being authorised by national authorities following an evaluation of their safety

WHY IS THERE  
PRESSURE  
AGAINST  
GLYPHOSATE  
PRODUCTS



**Monsanto Hit with Historic  
\$2 Billion Verdict Losing Third  
Straight Roundup Trial**



# Defra-funded 5-year programme entitled: Development of zero and minimal herbicide regimes for controlling weeds on hard surfaces and determining their emissions PS2802 (2009-2015)



- To develop new weed control specifications and test the effectiveness of no herbicide and integrated weed management
- Measure weed growth and identify weed species
- Determine herbicide losses to the wider environment
- Determine economic and environmental cost benefit analysis
- Develop and demonstrate guidelines for no chemical control/integrated control
- Obtain feedback from stakeholders

# Research



5yr project involving Thanet District Council looking at 3 weed control options:



Herbicide only – two programmed treatments:

1<sup>st</sup> - between April and May

2<sup>nd</sup> - between August and September



Integrated:

Reduced herbicide application combined with thermal and mechanical treatment



No herbicide:

Thermal and mechanical treatments only



- No herbicide proved unacceptable to community
- The other two methods can give satisfactory result
- Higher cost of mixed approach
- Carbon needs to be taken into account in assessments



# WEEDS

Best Practice Guidance  
Notes for Integrated  
and Non-chemical  
Amenity Hard Surface  
Weed Control

Place a Defra-funded 5-year programme-entitled  
Development of new and minimal herbicide regimes for  
controlling weeds on hard surfaces and determining  
their emissions PL2007 (2009-2014)

Criteria			Score	Level	Description
Height (mm)	Weed diameter or length (mm)	Joint coverage (%)			
<10	<50	<10	<3	1	No noticeable weeds
10-50	50-100	0-20	4-6	2	Occasional small weeds
50-100	100-150	20-30	7-9	3	Patchy weed growth with some flowering weeds
100-150	150-200	30-40	10-12	4	Numerous weeds, many flowering, view annoys or irritates public
150-200	200-300	40-50	13-15	5	Numerous large weeds, risk to slip or trip
>200	>300	>50	16-18	6	Numerous large weeds, many tall and flowering, causing obstruction





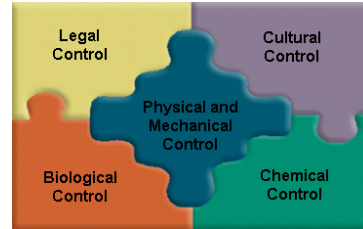
Research, conducted by Oxford Economics, showed that a ban on weed control products containing glyphosate would add £228 million to the UK's council tax bill each year.

# European Regulatory Process

- EU “Annex 1” approval for glyphosate runs for 5 years from 2017 to 2022.
- A new industry Glyphosate Task Force (GTF) has been formed.
- The new regulatory process is expected to begin late 2019, the scientific dossier is expected to be submitted in June 2020.
- EU has announced an innovative process with 4 Rapporteur countries:
  - **Netherlands** – leading on human health
  - **France** – leading on Eco-toxicology
  - **Hungary** and **Sweden** with minor roles
- Following an EFSA opinion (due from second half 2021 onwards) the political process of comitology is expected to begin in 2022.
- During 2019, many EU countries continue to work through formulated product approvals following the 2017 active ingredient re-authorisation.

# Glyphosate

- **The litigation in the USA will take time to resolve. It's going to be a lengthy legal process.**
- **The science supports that it is safe and keeps being confirmed by independent government regulators**
- **Glyphosate remains a vital tool for sustainable weed management**



**In practical terms, an integrated approach is**

Ensuring that , in planning a management programme, you consider the level of control required for specific areas and circumstances and consider all options available to achieve the required outcome efficiently, effectively & economically



The best time  
to repair a roof  
is when the  
sun is out.

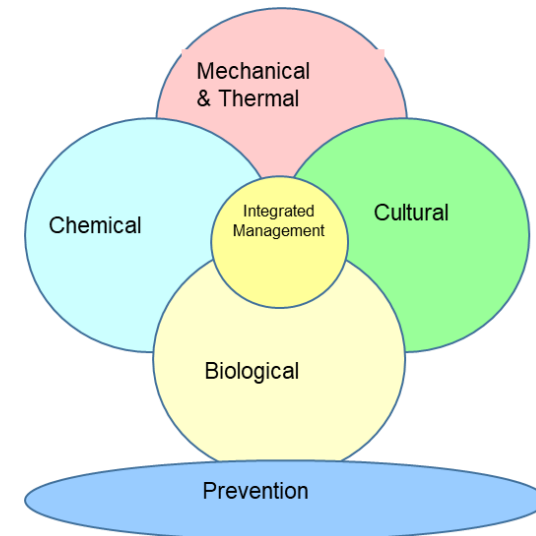
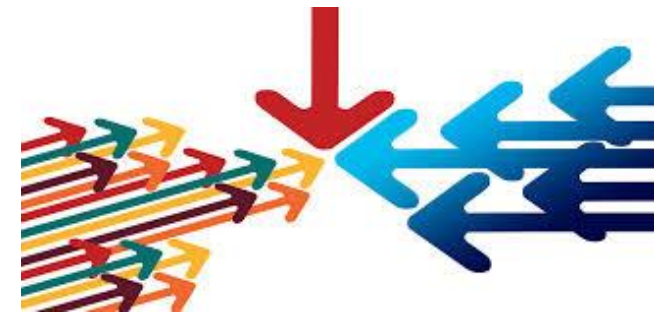
*John F. Kennedy*





## LAUNCH OF TWO DOCUMENTS

- Integrated weed management in amenity spaces – guidance
- Creating an integrated management plan template
- Integrated weed Management policy with Parks for London



## SO WHAT OF THE FUTURE?





The  
Amenity  
*Standard*

# THE AMENITY STANDARD



- INTRODUCED OCTOBER 2019
- FULL LAUNCH JANUARY 2020

**IN MANY WAYS THE EQUIVALENT OF RED TRACTOR**

**THOSE ABLE TO HOLD THE STANDARD AND DISPLAY ITS LOGO MUST BE MEMBERS OF A RECOGNISED AND APPROVED ASSURANCE SCHEME**

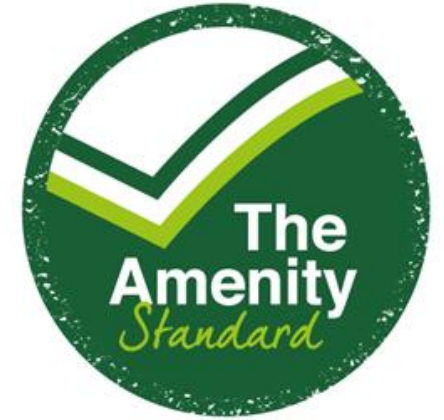
**AT LAUNCH INCLUDES THREE SCHEMES – AMENITY ASSURED, LAWN ASSURED & PCA INVASIVE SCHEME**

**PLAN IS TO EMBRACE MORE SCHEMES TO GIVE FULL SECTOR COVERAGE**

**NO EXTRA COST TO ORGANISATIONS**

**FEE TO COVER AUDITING ETC. PAID BY ASSURANCE SCHEMES**

# THE AMENITY STANDARD



- Provides a sector benchmark
- Focus on quality as an objective
- Provide assurances about the quality of the approved organisation(s)
- Promote confidence in quality management systems by provision of a robust and transparent system
- Initially three schemes to be included – PCA Invasive Weeds Membership, Amenity Assured, Lawn Assured
- More to follow



# CHEMICALS ARE UNDER ATTACK BUT THEY ARE NOT DOWN AND OUT

- They are an essential element in amenity management as part of an **integrated approach**
- Consider issues based upon **science and evidence** and **always use trained and approved operators**



# INNOVATION



- Advanced biology – developing biological regulatory, residues and resistance
- Genome editing
- Bio control – cha
- RNA based bioco
- Precision operati
- New chemistry
- Robotics and drom
- Back to good old simple husbandry – the right action, the right place, the right time



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# WHERE DO WE GO FROM HERE?

- Follow the Golden Rules ([www.amenityforum.co.uk](http://www.amenityforum.co.uk))
- Integrated approaches
- Preventive not curative
- Must communicate what we do
- Employ professional trained staff





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