

ENVIRONMENT

February 2021

Dates for your diary

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From February 1

- ▶ Farmers in all regions can spread chemical and organic fertiliser but only if conditions are right.

Do not spread slurry, fertiliser or apply chemical sprays on/when:



Water-logged soils



Frozen/snow-covered land



Heavy rainfall forecast



On sloping land

From March 1

▶ End of the hedge-cutting season

For the last few weeks of hedge cutting, remember best practice for each of the two common hedge types:

1. Topped hedge with a dense base, trimmed regularly, with the growing point cut. Side trim from a wide base to a triangular profile, leaving the peak as high as possible as long as the hedge cutter can reach to cut the growing point, but at least 1.5 metres (m) from the ground to the top of any bank present; and retaining occasional individual whitethorn trees at irregular intervals. Tightly manicured hedges 'short back and sides' are bad for wildlife and not good for the green image of Irish farming.
 2. Un-topped or escaped hedge or line of trees or strip of woodland. Side trim only. Never top – if rejuvenating, coppice or lay at ground level. Topping tall mature hedges at around 1m high results in totally inappropriate 'toilet brush' hedges.
- ▶ Before dormancy breaks (usually St. Patrick's Day) – plant new hedges.

Think before you plant a new hedge

When thinking of planting a new hedge, you must first decide if you want a hedge with a dense base that will be regularly topped or if you want a line of trees that will never be topped.

TOPPED



- Traditional hedge
- Dense base

UNTOPPED



- Escaped hedge
- Line of trees
- Linear woodland

Best practice to achieve a topped hedge:

- ▶ buy two year old bare rooted whips, six plants per metre, mainly whitethorn, but once every 2m replace one with another hedging species that tolerates trimming such as blackthorn, holly, hazel, spindle, guelder rose, dog rose and woodbine; therefore, for every 100m of new hedge, buy 550 whitethorn and 50 other of these species;
- ▶ mark out the line of the new hedge using wire, twine or lime;
- ▶ cultivate with a digger or mini-digger to make it easier to plant and give plants a great start;
- ▶ protect roots from drying out during planting by keeping plants in the bag until needed;
- ▶ plant in a double staggered row – with 330mm (just over a foot) between the rows

- and the same between the plants within the rows – often the length of a boot;
- ▶ plant to the same depth as was previously planted and don't bury the stem or expose the roots;
- ▶ firm in;
- ▶ identify a few whitethorn (maybe five per 100m) to be retained as trees and protect with tree guards or shelters;
- ▶ prune all other plants except holly down to an inch or so above ground level with a sloping cut to leave a sharp point;
- ▶ push a 4ft or 1.2m wide strip of used silage plastic down neatly over the cut stumps;
- ▶ press the edges of the plastic into the ground to hold it down; and,
- ▶ protect from livestock including rabbits if necessary. The aim is to remove that wire in a few years.

MESSAGE FROM ASSAP

Don't lose any fertiliser you spread

How to improve nutrient utilisation and minimise losses?

- Check soil conditions. Soil temperature dictates level of grass growth. Typically soil temperatures need to be 6°C and rising. This varies across the country depending on the weather, but this data can be accessed on Met.ie or acpmet.ie.
- Check the condition of fields. Are they trafficable? What is the soil moisture deficit (SMD)? If it is at or close to 0mm and the forecast is for rain, then it is advisable not to apply chemical or organic fertiliser. When soil is saturated or waterlogged it cannot soak anymore water. Water then stays on the surface of the field and flows over the surface with the fall towards drains or streams, bringing with it any recently applied fertiliser. This is not good for water quality. Delay spreading slurry or chemical fertiliser until both soil temperature and SMD are suitable, as these impact the early season growth rates.
- Match fertiliser application rates to grass growth rates at time of spreading and apply correct rates of fertiliser. The later into the spring, the greater the grass growth rate is. This means that the grass crop has a greater capacity to take up nutrients and utilise greater rates of fertiliser. Contact your advisor for further advice.
- Use protected urea and low-emission slurry spreading (LESS) to help reduce losses to the atmosphere.
- Buffer zones along watercourses – fenced or unfenced, containing trees or grass, help reduce nitrogen (N) and phosphorus (P) losses to water, as they help to 'break the pathway' by intercepting and taking up nutrients before they reach the water. Buffer strips are 'no-spread zones' for nutrients. Drains are designed to remove water from fields but act as corridors and connecting pathways for nutrients and so buffer strips should be sited along these areas of potential loss.

Table 1: Buffer zones.

	Organic fertiliser	FYM (in field)
Water supply >100m ³ or >500 people	200m	250m
Water supply >10m ³ or >50 people	100m	250m
Water supply (other)	25m	50m
Lake shoreline	20m	20m
Exposed cavernous or karstified limestone features	15m	50m
Any surface watercourse where the slope towards it is >10%	10m	
Any other surface waters	5m	20m

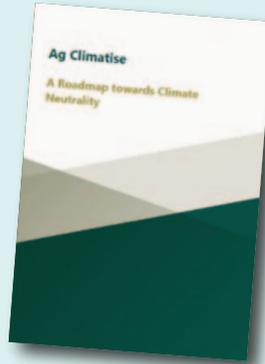
Note 1: For all surface waters, the buffer is 2m for chemical fertiliser and 5m for pesticides and chemicals.

Note 2: Buffer zone for spreading of organic fertiliser increases from 5m to 10m for the two weeks before and after the closed spreading period.

MESSAGE FROM SIGNPOST PROGRAMME

Now is the time for climate action

Just before Christmas, the Department of Agriculture, Food and the Marine (DAFM) published the **Ag Climatise** road map, with a stated aim of delivering on the ambition of the 2019 Climate Action Plan and the development of a climate neutral food system by 2050.



first step is to produce food as efficiently as possible. In Ireland, for livestock production this means a grass-based diet, good genetics and healthy, thriving animals. Other actions include: liming; optimising the use of N fertilisers; making better use of slurry and animal manures; switching to protected urea as a fertiliser N

source; applying all slurry using LESS equipment; improving pasture management; incorporating clover into swards; better breeding; reducing energy usage; and, improving management of hedgerows. Now is the time for action. We cannot afford to wait to implement the changes necessary. Nor indeed to wait for new technologies to emerge (as they will). There is no silver bullet solution; most farmers will need to adopt a mix of farm-specific solutions. What one change will you make on your farm in 2021 to put your farm on the path towards a more sustainable farming future? Consult with your Teagasc advisor and select one climate action that you can make happen in 2021. Write it down and commit yourself to doing it. Finally, Teagasc is committed to working with farmers, and agricultural sector partners, to enable farmers to adapt their farming practices to reduce agricultural emissions.

Recently, the World Meteorological Organization (WMO) confirmed 2020 as one of the warmest years on record, with average global temperatures reaching 1.2°C above pre-industrial levels (Figure 1).

Therefore, while our planet continues to warm at unsustainable levels, there are significant ambitions to reduce emissions from Irish agriculture in the coming years.

Research has identified how farming could change to reduce agricultural emissions. The

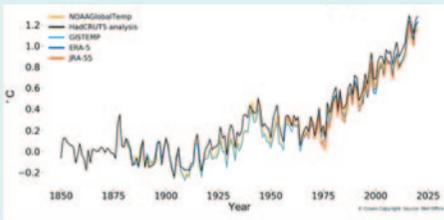


FIGURE 1: Global mean temperature difference from 1850-2025 (°C). From: <https://public.wmo.int/en>.