



Today's Farm

Business, production, environment and countryside issues www.teagasc.ie



New Entrants Thriving on Dairy Challenges.

- Silage: planning for next winter**
- How to stick to your dietary goals**
- Managing cashflow in a crisis**
- Toning up your mental health muscles**
- Dairyman delivers**
- Sheep: more profit less hardship**
- Tips from a cattle trader**
- Tillage fungicides**
- The fruits of forestry**
- Botanic gardens and more.....**

KNOW YOUR ENEMY



Horse Fly

Tabanus sp.
Chrysops sp.
Haematopota sp.

KNOW YOUR ENEMY



Head Fly

Hydrotaea irritans

KNOW YOUR ENEMY



Face Fly

Musca autumnalis

KNOW YOUR ENEMY



Stable Fly

Stomoxys calcitrans

KNOW YOUR ENEMY



Horn Fly

Haematobia irritans

KNOW YOUR ENEMY



Midge

Culicoides

Dose monthly and prevent a season-long nuisance to your herd

Spot On keeps existing fly populations under control. When you're on top of the problem you need to stay on top with a monthly programme. Spot On makes dead certain you're killing the new wave as they emerge.


- Different fly species emerge throughout the summer
- Fly populations quickly expand to become large irritating swarms
- Keep fly problems at bay with regular, frequent treatment -
Monthly: starting in April/May

Active against
Culicoides
the Schmallenberg
Virus midge vector¹

Pfizer

SPOT ON
Kills flies **DEAD**

For further information please contact your veterinary surgeon or Zoetis, 9 Riverwalk, Citywest Business Campus, Dublin 24 Tel: 01-4676650

Pfizer Spot On contains deltamethrin 1% w/v. 

1. Schmall et al, Parasitol Res (2009) 104:809-813

zoetis

4 & 6 **Etc**

8-9 **Upcoming events**

Fodder

10 Silage: planning for next winter

Farm management

16 Managing cashflow in a crisis

18 Toning up your mental health muscles

20 Case study: Ireland vs Brittany

Dairying

22 Dairyman delivers

25 New entrants thriving on dairy challenges

Drystock

28 Sheep: more profit less hardship

30 Breeding the key in east Clare.

32 Tips from a cattle trader

Tillage

34 Fungicide returns still fabulous

Forestry

36 The fruits of forestry

Botanic gardens

38 Make your own decorative troughs

HEALTH
Avoid junk food and stick to your dietary goals
>> 15



Today's farm is a bi-monthly publication produced in a joint venture between Teagasc and the Agricultural Trust, publishers of the *Irish Farmers Journal* and *The Irish Field*.

Editor: Mark Moore | Editorial team: Alison Maloney, Joanne Carroll, Eric Donald
Chief sub-editor: Leslie Horgan | Sub-editors: Regina Horan, Garrett Allen, Rosie McCormack, Brian Murphy

Cover design: Design at DBA | Imaging: Owen McGauley
Printing: Boylan Print Group, Drogheda, Co Louth | Advertising: Frank McGouran
All Media Matters (01) 4941071 086-8111567 sales@allmediamatters.com

All editorial enquiries to: Teagasc, Oak Park, Carlow
Tel: (059) 9170200 Fax: (059) 9183498
e-mail: mark.moore@teagasc.ie | web: www.teagasc.ie

The publishers do not accept responsibility for any private and trade advertisements or advertising insertions included in this publication. Occasional reference in this magazine to trade names and proprietary products may be inevitable. No endorsement of named products is intended, nor is any criticism implied of similar products which are not mentioned.

Cover | New entrant dairy farmers (front four): Brendan Phelan, Sean Duggan, facilitator Roberta McDonald and Jimmy Payne. Next row: Ed Payne, Paul Kelly, Philip Dwyer, Ian Wharton, Brendan Horan (Teagasc), Patrick Murphy and John Payne. You can read more about the challenges they face on pages 25 to 27. Picture: Clare Frances

COMMENT

Imagined limitations



Mark Moore
Editor,
Today's Farm

When researching the article on silage, we heard of the case of Carrick-on-Suir farmer Dermot Lanigan who found some 16-year-old silage at the back of a pit. The silage was well preserved and eaten with relish by his dry cows. This shows that well-made silage will last what seems an extraordinary length of time.

Hopefully farmers will be able to harvest sufficient grass to consider building such a long-term buffer, if not this year, then possibly next. But to me, the case of the long-life silage shows that we sometimes set limits in our minds, or hold perceptions, which may not correspond to reality.

I didn't think silage could remain palatable for so long. Now silage will either go off or it won't. But how often do we decide in our minds that we can't do this or that, when in reality the only thing stopping us may be our belief that it is so.

Sriantaí samhalta

Nuair a bhí ár gcuid taighde á dhéanamh againn don alt ar shadhlas chualamar trácht ar chás an fheirmeora ó Charraig na Siúire, Dermot Lanigan a tháinig ar roinnt sadhlais a bhí ann le 16 bliana ag cúl chlaise. Bhí an sadhlas caomhnaithe go maith agus d'íth a chuid bó sheasc go fonnmarh é. Léiríonn sé seo go mhairfidh sadhlas dea-dhéanta tréimhse ama thar na bearta. Táthar ag súil go mbeidh feirmeoirí in ann go leor féir a bhaint le lón machnaimh a dhéanamh de stóras fadtéarmach dá leithéid sin a thógáil, murach i mbliana, an bhliain seo chugainn b'fhéidir. Ach i mo thuairimse, léiríonn cás an tsadhlais fadsaoil go leagainimid teorainneacha inár n-aighe ar uairibh, nó go mbíonn barúlacha againn, a d'fheadfadh nach bhfuil ar chomhréir le réaltacht.

Níor cheap mé go bhféadfaí sadhlas a choimeád dea-bhlasta ar feadh achair ama chomh fada sin. Anois éir-eoidh sadhlas bréan nó ní dhéanfaidh. Ach cé chomh minic inár n-aighe féin nach féidir linn é seo nó é sin a dhéanamh, ach i bhfírinne an scéil níl faic ag cur bac orainn ach b'fhéidir ár gcreideamh féin gur mar sin atá.



Advanced Certificate in Horticulture (Level 6)

Horticultural students with a Certificate in Horticulture (Level 5) award should consider increasing their employabil-

ity by progressing on to this Level 6 qualification. While the Level 5 award is a good general introduction to horticulture, this add-on year will enable the learner to acquire the knowledge, skill and competence to supervise work in a range of horticultural areas using specialised skills. This course also meets the training requirements for Stamp Duty Exemption.

The course will be offered in four main

streams of learning, Food Production, Nursery Production, Landscaping and Sports Turf, depending on student interest. Students will spend 16 weeks of practical learning within the horticultural industry directly linked to their chosen learning stream, while another 16 weeks will be spent at the college.

This course is offered both at the College of Amenity Horticulture, National Botanic Gardens, Dublin and at Kildalton College, Piltown, Co Kilkenny.

- Application forms are available directly from the colleges.



LEFT: Teagasc Kildalton student Edmond Doherty is pictured completing a landscape design drawing as part of his Advanced Certificate in Horticulture. Participation in Level 6 courses involves practical work experience, classroom tuition/lectures, and the development of advanced skills such as using AutoCad to generate highly sophisticated landscape designs.

BOOK REVIEW

Atlas of the Great Irish Famine

(Cork University Press, 2012)

A definitive study of the Famine, this hugely impressive book covers all the important issues surrounding a catastrophe in which over a million individuals perished in what at the time was the most advanced and civilized region of the world.

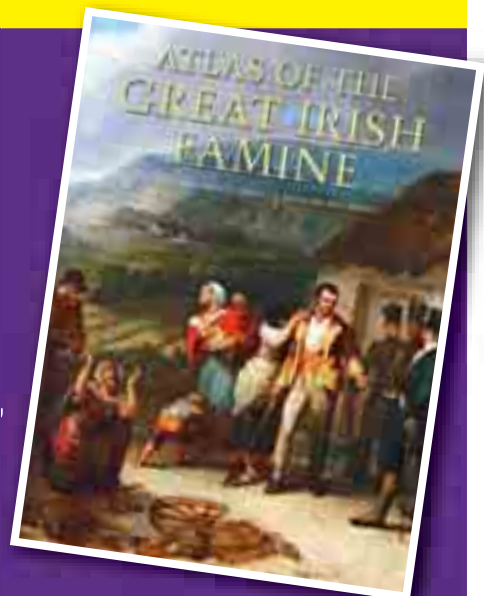
How and why it occurred, the witnesses, reactions and responses to it, the aftermath and the legacy, how it is remembered — and a section on the hunger and famine that continues to

blight parts of our planet — all these vital and still relevant questions are addressed and explored by a team of over 60 scholars.

Every one of the 700 pages of this hefty (about 4kg) book justifies itself and, with over 150 parish maps relating to the 1841-1851 decade and case studies covering all four provinces, you are very likely to find detailed information relating to how your locality was affected by this traumatic event.

- **Atlas of the Great Irish Famine, available in good bookshops, costs €46 from Amazon (<http://www.amazon.co.uk/>) including postage to Ireland.**

— Sean Sheehan





Siltra[®]
Xpro

“You can always
count on a great
performance
from me.”



Your barley yield is valuable to you, so you want to get the best to protect it. Siltra_{xpro} has the exceptional chemistry of prothioconazole and bixafen, a powerful combination that's the perfect product to form the cornerstone of your barley disease programme.

- Contains Bayer's unique prothioconazole chemistry with new bixafen for exceptional disease control
- Ultimate protection against *Rhynchosporium* and rusts, with improved performance against *Ramularia* and net blotch in high disease pressure situations
- The perfect formulation for high yield potential crops

Find out more about the only protection you need for your barley at www.bayercropscience.ie

It's all about the chemistry.



www.bayercropscience.ie



150 Years
Science For A Better Life

Social media provide answers

Facebook and Twitter – the so-called social media – are mostly known as ways of sharing experiences, pictures and opinions. If you want to know what your teenagers are really up to, you need to see their Facebook page....though they may not be so keen to grant you access.

As the number of people using social media grows, their true potential as a communication tool is becoming clear. Teagasc is now using Twitter and Facebook to conduct live and interactive Question and Answer sessions on topical issues.

"People simply type a question and submit it via Facebook or Twitter," says Alison Maloney of the Teagasc PR department, who has co-ordinated the first two sessions. "The first Q and A was on issues related to the fodder crisis. People sent a question to us via Facebook, Twitter or email and the answer was typed up and returned by Teagasc nutritionist Siobhan Kavanagh. The question and answer were also posted on Facebook and Twitter. Several thousand people viewed each answer soon after it was posted."

A second Q and A session focused on issues in relation to education with John Mulhern of the Teagasc college at the Botanic Gardens and John Kelly of Teagasc Clonakilty college providing the answers.

"To participate in the Q and A sessions, you simply need to 'Like' Teagasc on Facebook," says Alison Maloney. "Once you have done that, you will be notified in advance of future Q and A sessions."

All of the questions and answers are recorded and posted on the Teagasc website where anyone with internet access can view them. See http://www.teagasc.ie/publications/view_publication.aspx?PublicationID=1915

Many Teagasc events, such as the public lecture series conducted in collaboration with the Royal Dublin Society, are also using social media to allow people who may be watching online via 'Webinars' to participate in the live event. During these events, questions or comments on the material presented can be submitted by anyone, worldwide, with access to email or the social media.



Orange flour for gluten-free bread

During the processing of fruit and vegetables one third is discarded — this might include the core, pips and peel of the fruit or vegetable. This 'waste' can be costly for the manufacturer to dispose of and it may actually contain beneficial nutrients.

Orange pomace, a by-product from the smoothie and juice industry, has proven to have good nutritional attributes; it is low in fat (2% dry matter) and high in dietary fibre (40% dry matter) and has the potential to be used as a food ingredient.

Researchers at Teagasc Food Research Centre, Ashdown, and University College Cork have been looking at possible uses for this discard, for example, the use of orange flour in gluten-free bread formulations.

Nearly one in a hundred Irish people suffer from celiac disease, which means they are intolerant to wheat gluten. This greatly reduces their dietary options.

Dr Eimear Gallagher, Teagasc Food Research Centre, explains: "We have been working to establish the optimal level of orange pomace, water addition and ideal proofing time to produce a good, gluten-free bread."

"Sensory panelists scored the bread favourably with respect to appearance, flavour, texture and overall acceptability," says Norah O'Shea, a PhD student of Dr Gallagher. "The addition of this ingredient is not limited to gluten-free bread; it has potential to be used in both gluten-containing and gluten-free breads and confectionary," adds Dr Gallagher.





Doxstar

CONTROLS DOCKS
IMPROVES SILAGE

THISTLEX
GETS TO THE ROOT
OF THE PROBLEM

PASTOR
FOR OUTSTANDING CONTROL OF
DOCKS, NETTLES AND THISTLES

GRAZON
SPOT TREATMENT
FOR DOCKS, NETTLES
AND THISTLES

Forefront
BETTER WEED CONTROL,
BETTER GRAZING

Looking after and nurturing grassland is at the heart of a well run livestock enterprise. Whether you have unsightly docks, nettles, thistles, or insect pests like frit fly or leatherjackets, then Dow AgroSciences has a dedicated range of grassland herbicides and a leading insecticide to get your pasture back to full productivity and looking good.

USE PLANT PROTECTION PRODUCTS SAFELY. ALWAYS READ THE LABEL AND PRODUCT INFORMATION BEFORE USE.
Triple rinse, puncture and invert to dry at time of use.

Distributed by Whelehan Crop Protection. Tel: 0 1 8068600
E-mail: info@tpwhelehan.ie www.dowagro.ie

Grazon, Doxstar, Pastor, Thistlex and Forefront are all trademarks of Dow AgroSciences LLC.

Whelehan
CROP PROTECTION

Dow AgroSciences
Pasture to be proud of



ASH DIEBACK (*CHALARA FRAXINEA*) INFORMATION MEETINGS, NATIONWIDE, 20 TO 31 MAY 2013

Ash dieback (*Chalara fraxinea*) is a serious concern for one of Ireland's most important native trees. In response to recent findings of *Chalara fraxinea*, forest owners are asked to attend a Teagasc/Forest Service meeting in their local area to learn more about the disease. Staff from Teagasc and Forest Service will cover a range of topics including:

- What is ash dieback?
- What does it look like?
- What is the current situation in Ireland?
- What should you do if you have a suspect tree?
- What measures are being taken to eradicate the disease?

This series of evening meetings will run from 20 to 31 May and will be held in local Teagasc offices. All meetings start at 8pm. See *Table 1* below for more information on meetings in your area.

THE FIRST IRELAND/BRITISH FOOD BUSINESS SUMMIT, DUBLIN, WEDNESDAY, 29 MAY

The Food Business Summit is a one day conference, which will bring together leading British and Irish food company executives and retailers, along with policy-makers, research managers and educationalists to:

- Discuss key challenges and opportunities that exist across both islands for suppliers, manufacturers and retailers.
- Identify opportunities for enhanced business through greater collaboration.

• Understand how innovation, research and knowledge within a broader European context can create a strong platform for enhancing the competitiveness of the food sector.

The theme of this first summit, which is sponsored by Teagasc and the Institute of Food Research, Reading, is 'Exploiting synergies for growth through innovation, research, skills and knowledge.'

For details, please contact: Mary Reilly | mary.reilly@teagasc.ie | +353 1 8059582

SHEEP OPEN DAY 2013 TEAGASC, ATHENRY, CO GALWAY, THURSDAY, 6 JUNE

Topics covered will include:

- Sheep breeding and genetics
- Ewe lifetime productivity
- Flock health and parasite control
- Results from the new Research Demonstration farm
- Teagasc BETTER sheep farm programme
- Reseeding and fertilisation
- Teagasc sheep advisory programme

KNOWLEDGE TRANSFER CONFERENCE 2013, UCD, 12, 13 AND 14 JUNE

The topic 'Future of Farm Advisory Services, Delivering Innovative Systems' will be the key focus at the three-day conference, which takes place at Astra Hall, Student Centre, University College Dublin, Belfield, Dublin 4. Teagasc, along with UCD and the European Commission, the Knowledge Transfer Conference to enable discussions among policy-makers, advisory services managers and other stakeholders on the



effectiveness of advisory services in providing innovation support to farmers through the measures proposed in CAP 2013-2020.

For a booking form and conference programme, visit www.teagasc.ie/events or contact Liz O'Sullivan, Teagasc on 0599183489.

Table 1: Teagasc/Forest Service information meetings on ash dieback

County	Location	Venue	Date
Cavan	Ballyhaise	Advisory Office	Mon 20 May
Clare	Ennis	Teagasc Office	Mon 27 May
Cork	Fermoy	Advisory Office Moorepark	Tues 28 May
Cork	Macroom	Teagasc Office	Weds 29 May
Donegal	Letterkenny	Teagasc Office	Tues 21 May
Galway	Athenry	Teagasc Mellows Campus, Clareen Room	Weds 29 May
Kerry	Killarney	Teagasc Office	Weds 22 May
Kildare	Naas	Teagasc Office	Thurs 23 May
Kilkenny	Kilkenny	Teagasc Office	Weds 29 May
Laois	Portlaoise	Teagasc Office	Tues 28 May
Leitrim / Sligo	Mohill	Teagasc Office	Thurs 23 May
County	Location	Venue	Date
Limerick	Newcastle West	Teagasc Office	Tues 21 May
Mayo	Claremorris	Teagasc Office	Weds 22 May
Meath	Navan	Teagasc Office	Mon 27 May
Monaghan	Monaghan	Teagasc Office	Tues 21 May
Offaly	Tullamore	Teagasc Office	Monday 20 May
Roscommon	Roscommon	Teagasc Office	Tues 21 May
Tipperary	Clonmel	Teagasc Office	Weds 22 May
Tipperary	Nenagh	Teagasc Office	Weds 29 May
Waterford	Dungarvan	Teagasc Office	Tues 21 May
Westmeath	Mullingar	Teagasc Office	Weds 22 May
Wexford	Enniscorthy	Teagasc Office	Thurs 30 May

Meetings start at 8pm



Ash dieback is a serious concern for one of Ireland's most important native trees.

will have a chance to see the field experiments at Teagasc, Oak Park, Carlow and discuss with researchers and crop specialists the latest methods for optimising crop production. A wide range of field experiments will be on display, including;

- Oilseed rape cultivation and management trials
- Cereal disease control
- Winter wheat and spring barley varieties
- Nitrogen management in cereals
- Spring barley growth experiments

NATIONAL FARM HEALTH & SAFETY CONFERENCE 2013, ABBEY COURT HOTEL, NENAGH, CO TIPPERARY, WEDNESDAY, 26 JUNE

A leading expert on the psychology of accident prevention will speak at the National Farm Health and Safety Conference which takes place from 10am to 1pm on 26 June.

Professor Stephan Van den Broucke from the Faculty of Psychology and Education at the Catholic University of Louvain, Belgium, will present 'Designing more effective Farm Safety programmes — Understanding what drives safe behaviours'.

At the conference, Teagasc specialists Tom Ryan and John McNamara will outline key strategies to manage safety and work organisation in agriculture which is poised for expansion.

Dr Noel Richardson, director of the Centre for Men's Health at

Carlow Institute of Technology, will outline strategies for farmer to gain and maintain health.

All are welcome to attend the event. No booking is required.

For information, contact: John McNamara, Teagasc health and safety officer (051 644537). Email: john.g.mcnamara@teagasc.ie

DAIRY OPEN DAY, TEAGASC, MOOREPARK, FERMOY, CO. CORK, WEDNESDAY, 3 JULY

World demand for dairy products is expected to increase further, due to global population growth and increases in per capita disposable income especially in developing countries.

The abolition of milk quotas in 2015 gives many dairy farmers scope to increase milk production for the first time in 30 years.

To ensure success, dairy farmers must be able to plan, finance and deliver expansion while at the same time confront issues such as volatility in milk price and difficult weather conditions as experienced in 2012.

Expansion in the dairy farm business should only be undertaken if it increases profit and provides a better lifestyle to the farm family.

When EU milk quotas are abolished, farm profitability will depend on maximising profit per hectare, i.e. stocking your farm to match grass supply. This major open day will provide the roadmap to deliver these goals for the Irish dairy industry.

TEAGASC/UCD GREENHOUSE GASES AND ANIMAL AGRICULTURE CONFERENCE, UCD, 23 TO 27 JUNE 2013

Teagasc and University College Dublin are holding a Greenhouse Gases and Animal Agriculture Conference in UCD in June.

This scientific meeting will attract speakers and delegates from across the globe and builds on previous successful meetings in the series.

The meeting will focus on advancements in the areas of animal derived GHG mitigation since the last meeting in Banff, 2010. Efforts are underway to maximise participation by delegates from developing countries.

For more information, see the website www.ggaa2013.ie

CROPS OPEN DAY 2013 TEAGASC, OAK PARK, CARLOW WEDNESDAY, 26 JUNE | 2PM

Teagasc invites you to a crops open day at Oak Park in June where you



RBC
RYAN BROS CONSTRUCTION

BALLYMACARBRY, CO. WATERFORD
TEL: 052 6186900 www.ryanbrothers.ie

FARM BUILDINGS FOR THE FUTURE

DESIGN - CONSTRUCTION - PRODUCTS

MILKING PARLOURS



CUBICLE HOUSING



STEEL FABRICATING - STRUCTURAL STEEL & CLADDING

TANKS - WALLS - FLOORS

CUBICLES - MATS - BARRIERS - GATES - SCRAPERS



'ONE EXPERT CONTRACTOR - SAVES YOU TIME & MONEY'





FIVE STEPS to super silage

Padraig O'Kiely
Teagasc Animal and Grassland
Research and Innovation Programme

When a meadow is close to harvest for silage-making, these steps will help ensure the crop preserves properly in the silo or bale.

Step one

Check the ensilability

Meadows differ greatly in the ease with which they can be preserved as silage (i.e. in their ensilability). For example, it is easier to achieve good preservation with ryegrass swards that are successfully wilted than with swards that have little ryegrass and are harvested under wet conditions.

A reliable measure of ensilability is grass sugar content. This test that has proven reliable over many years. Crops with more than 3% sugar (in the grass juice) are relatively easy to preserve.

Knowing the ensilability can help you decide on the need for an additive (type, rate of application, etc, or alternatively maybe an additive is not needed).

Step two

Safety

Plan the silage-making with a strong focus on the safety of everyone involved.

Step three

Avoid contamination

Most grass is harvested cleanly, but occasionally grass can be contaminated with soil during mowing, harvesting or silo filling. The soil can inoculate the grass with high numbers of bacteria that are harmful to the preservation process.

Step four

Wilt effectively

If grass is quickly wilted so that it dries to over 25% dry matter within 24 hours of mowing, then the resultant silage should be well preserved and produce little or no effluent. Even in good weather, the mown grass to be wilted should be tedded or placed in wide rows to dry properly.

Step five

Keep the air out

This is vital. For both clamp and walled silos, fill quickly and seal immediately. In walled silos, place a strip of plastic sheeting along the wall during filling and fold this back onto the top of the grass in the filled silo. The two main sheets of black plastic sealing the top and side of the pit should extend over the wall sheet. An edge-to-edge layer of tyres will protect the top and sides but, in addition, place an unbroken row of sandbags where the

plastic meets the wall.

Waste on the sides of a clamp is less likely if the slope is not too steep because tyres can keep the plastic pressed against the silage. Sandbags should be placed tightly where the plastic touches the ground.

Silage bales need to be wrapped in plastic stretch-film within an hour or two of being made, and the seal must be maintained thereafter. This is easier to achieve where bales are wrapped at the storage site. Where wrapped bales need to be transported from the field, take great care to avoid damage to the plastic film.

Vintage fodder: Unlike wine, silage may not actually improve with age but this winter showed that it can certainly remain palatable and retain feeding value for many years. "We filled a pit in 1996 and we had not got to the back wall of it until this year," says Dermot Lanigan, a Teagasc/Glanbia monitor farmer close to Carrick-on-Suir.

"There was a layer of waste at the surface of course," says Dermot. "But, when that was removed, the dry cows were happy to eat the silage underneath. I think if silage goes in well and is sealed right, there is no problem."

This re-enforces the value of making good silage from good quality grass. If managed carefully, a surplus is never likely to go to waste and can act as a 'strategic reserve' for winters like 2012/13.

Continues >> page 12



AdexarTM

Unrivalled performance against *Septoria*.

Based on data over 3 years in
independent Irish trials

For farmers who expect more
www.adexar.ie

 **BASF**

The Chemical Company

Xemium is a registered trademark of BASF and is the active ingredient brand name. Adexar is a trademark of BASF and contains fluxapyroxad and epoxiconazole. Use plant protection products safely. Always read the label and product information before use. For further product information including warning phrases and symbols refer to www.agriCentre.basf.ie Pay attention to the risk indications and follow the safety precautions on the label. Triple rinse containers and invert to dry at time of use.

silage

Fodder for next winter

Siobhan Kavanagh

Teagasc Animal and Grassland Research and Innovation Programme

The challenge this summer is to conserve enough forage to meet the need for winter feed and also to have a buffer of feed for spring and autumn. Here's how to go about it.

Work out how much you need

There are two main factors to consider:

- Normal winter length on your farm
- Buffer feed required during the main grazing season and the 'shoulders' of the year.

Winter feed

Take a sample farm with 100 cows carrying 30 replacement units, which is a total of 130 livestock units. The 'typical' winter length for the farm could be three, four or five months, depending on location/rainfall levels/soil type, etc. *Table 1* shows how the total demand is calculated.

Buffer feed

In recent years, it's the silage fed outside the normal winter that has created much of the feed shortages. Every farmer should estimate how much additional feed (buffer feed) is needed. Factors to consider include:

- **Overall farm stocking rate:** farms with high stocking rates will experience greater grass shortages in autumn/early spring. There should be a reserve of feed to cope with this risk. Also, any slowdown with growth during the summer will impact more quickly on highly stocked farms.

- **Stocking rate on the milking block:** extra cows on a set area will create added grazing pressure in autumn/spring on the grazing block.

- **Soil type:** risk of stock being unable to graze during high rainfall periods on heavy soils, also risk of drought on shallow light soils.

- **Grass:** growth potential in the region and on the farm.

- **Rainfall levels:** unpredictable for the farm to forecast, but must be considered taking into account soil type and stocking rate.



Some farmers aim to have one bale of high quality silage per cow as a buffer, in addition to normal winter feed. However, this won't be enough in a difficult summer/winter and spring. Two bales of high quality silage is equivalent to an additional 400kg DM (~ 2.0 tonnes of pit silage). This would allow 5kg of silage DM to be fed per day for 40 days in autumn and 40 days in spring. On some farms, even this much may not be sufficient to cover the risk.

Required winter feed and buffer feed

Table 1 shows that 886 tonnes of winter feed is required on the sample farm, plus an additional 200 tonnes of buffer feed.

Estimate how much silage two cuts will yield

You should consider the following factors below when making silage.

Response to nitrogen fertilizer

Response rate to nitrogen will vary from year to year due to temperature, sunshine, rainfall, ground conditions, type of grass sward, reseed or not, soil fertility, etc. But the biggest response to fertilizer is in the April/May and June/July periods when the value of the additional grass for every 1kg N spread is €3 to €10. Assuming a price for CAN of €325/tonne or €1.20/kg N, this is an economic response. However, it must be stressed that applying nitrogen where soil fertility or pH status are not correct is wasteful.

Closing date

Many silage fields have been grazed late this spring. The effect on yields of grass for silage is significant. Work from Teagasc Grange suggests that silage dry matter yields could be up to 50% lower on fields grazed twice (in March and late April), compared with fields grazed once in March (*Table 2*).

Therefore, what is a realistic yield? For silage ground closed on 20 April and harvested on 20 June, a utilisable yield of approximately 7.5 tonnes fresh weight per acre might be expected. With twice-grazed grass, DMD will fall more slowly and be slightly higher in late June. The target for grass harvested on 20 June is approximately 70% DMD.

Area closed

Assume that our sample farm is stocked at 2.16 livestock units per hectare (three LU/ha on the milking platform) with a milking block of 33ha and 27ha on the outfarm. During the peak grass growing season, the farm can be stocked at four cows per hectare, which allows for a first cut of 8ha on the milking platform and 21ha on the outfarm. The deficit on this sample farm is 424 tonnes of silage (1,086t — 662t = 424t). The need for a buffer is contributing significantly to the deficit and the fact that there is no silage in reserve on this farm. Early planning is critical to ensuring that this deficit is filled. While the main focus of this article is filling the gap from the fodder supply perspective, it



Siobhan Kavanagh, John Dowling and Teagasc adviser Mark Trimble. John farms 129ha at Seven Sisters, Johnstown, Co Kilkenny. He has 120 dairy cows, 90 replacements and 220 cattle. John ran out of silage and bought silage for cows with some grass and meal; he fed straw, hay, meal and soya hulls to cattle and dry cows. "I haven't done second cut silage for the last few years but I will this year and bale as much surplus grass as possible," says John.

is important to take a look the grass growing capacity of the farm, relative to stocking rate.

Identify your options if there is a gap

Surplus bales

Surplus grass baled as silage during periods of rapid growth is a high value product on any farm. It is a vital tool for good grassland management and is an alternative method of utilising homegrown forage. The quality of this material tends to be excellent and it can be an effective supplement to autumn grass, maintaining levels of milk solids. Comparing forages on an energy basis is more effective than comparing them on the basis of dry matter yield, because of variation in feeding value. In this case, surplus bales cost approx €190/1,000 units of energy (UFL). Surplus bales are a bonus and should not be relied on to fill a winter feed deficit

Rent silage ground

Rental charges will drive the value of this option. In the case below, we have assumed fertilised ground closed on 20 April and harvested on 20 June. The yield potential of a crop is approximately 7.5 tonnes fresh weight of utilisable yield/acre, of good quality ~ 70% DMD. The quality and yield will be determined by the quality of the sward rented. The energy cost varies from €232/1,000 UFL for silage ground at €150/acre to €369/1,000 UFL for silage ground costing €300/acre.

Table 1: Estimated pit silage (20% DM) for a 100-cow herd with 60 followers for a four-month winter and buffer feed of two tonnes per cow

Stock type	Number	Tonnes per month	Length of winter, months	Tonnes required
Dairy cow	100	1.6	4	640
0-1 replacement	30	0.7	4	84
1-2 replacement	30	1.3	4	156
2+ yr animals	1	1.6	4	6
				886
Buffer feed	100 cows	Two bales per cow		200
Total required				1,086

Table 2: Effect of spring grazing on utilisable grass silage yields (t DM/ha)

Silage harvest date	Grazing in spring		
	Twice 16/3 & 22/4	Once 16/3	None
20 May	1.12	3.27	4.22
30 May	1.96	4.45	5.61
9 June	2.71	5.38	6.84
19 June	3.68	6.37	7.27

Table 3: Expected silage yields

	Stocking rate on grazing area available (LU/ha)	Ha avail for silage	Yield tonnes fresh/ha	Tonnes conserved
First cut - milking platform (closed late April, cut early June)	4.0	8	13.5	108
First cut — outfarm (closed late April, cut late June)	4.0	21	18.5	389
Second cut — outfarm	3.0	11	15	165
Total supplied				662t fresh

Table 4: Cost of baling surplus grass as silage

	€ / bale
Fertilizer	7
Cutting	6
Tedding	3.5
Baling and wrapping	10
Land charge	5.5
Total costs	32
€ /t	48
€/t DM	160
Silage DMD	75%
Energy UFL/kg DM	0.84
€/1,000 UFL	190

“ Work from Teagasc Grange suggests that silage dry matter yields could be up to 50% lower on fields grazed twice (in March and late April), compared with fields grazed once in March

Continues >> page 14

>> From page 13

Closing up additional ground for silage

Some may be considering the option of closing up additional silage ground for first cut and feeding meals to fill the intake gap in May/early June.

Every kilo of meal fed will not prevent the cow eating 1kg grass unless a strip wire is used to restrict grass allocation for each grazing. This is not practical or advisable during the main grazing season. It is a costly way to conserve extra silage. A kilo of meal fed will cost about 30c (at €300/t), therefore, every kilo of DM of grass saved as silage will cost well in excess of 30c when harvesting and losses are taken into account.

In short, where meal is fed and grass is not restricted, there will not be a direct one to one substitution of meal for silage and milk yield will receive a boost. But the net result is the same — a very costly way to make additional winter feed.

Forage crops

Forage crops grazed in situ provide an option for farmers with access to dry land to reduce winter feed demand. Possibilities include kale, rape, swedes, and turnips. Swedes and kale are usually sown from mid-May to mid-July. The earlier they are sown, the higher the yield. Stubble turnips and rape are usually sown later.

Rape or stubble turnips could be sown after harvesting cereals in August. Target yields for these crops range from four tonnes DM/ha for forage rape to eight tonnes DM for kale. Yield and efficient utilisation will have a major effect on any potential cost saving with these crops.

As most of these crops will be grazed in situ in the November to March period, care needs to be taken to minimise the potential for poaching and/or soil erosion. The production cost associated with brassica crops is €184 to €236/1,000 UFL, assuming plough, till and sowing the crop. Given the low yields of rape, min-till or no-till would be more cost effective.

Purchase alternative forages

Maize silage, whole crop cereal silage and fodder beet are options but yield and quality of these crops can be variable. Buying a standing crop on the basis of area rather than yield is fraught with error. It is



Feed restricted roughage and meals

Some of the deficit in silage stocks can be filled by feeding restricted silage, e.g. feeding 75% of the normal forage requirements of the animal, plus 2kg meals for a period of time. Assuming ration is costing €300/tonne, this option works out at €214/1,000 UFL. This compares favourably with other options.

Table 5: Cost of first cut silage at different land rental charges

	Rental charge €/acre				
Rental charge*	€100	150	200	250	300
Harvesting	110	110	110	110	110
Ensiling	12	12	12	12	12
Total production cost €/acre	222	272	322	372	432
Cost €/t DM	148	181	215	248	288
Cost €/1,000 UFL	190	232	276	318	369

*Rental charge for fertilised silage ground

Table 6: Summary of the costs of the different options

		€/1,000 UFL	Comments
Surplus bales		190	Depends on stocking rate
Land rental	€100 /acre	190	Assumes land is fertilised and available for first cut only
	€150	232	
	€200	276	
	€250	318	
Forage crops*	Kale	184	Must have suitable dry land, not on the grazing block
	rape**	236	
Maize silage		180-229	Must be balanced for protein and minerals
Fodder beet		160-210	Must be balanced from protein & minerals AND need handling equipment
Restricted silage + meals		214	Silage must be restricted and offer adequate feeding space

difficult to visually estimate the yield of a crop. It is preferable to weigh loads of the crop, during harvesting, to establish yield. Yield potential can vary from 11.5t DM/ha to 17t DM/ha for maize silage, depending on the year and plastic or no plastic.

The relative value of these crops will depend on concentrate price at any point in time. Fodder beet is worth approximately €34/tonne and maize silage (25% starch) is worth €44/tonne, when rolled barley is €200/tonne. When rolled barley is €250/tonne, fodder beet is worth €44/tonne and maize silage (25% starch) is worth €55/tonne.

Summary

- Act early: put a strategy in place this summer to ensure that you have adequate forage for the stock on the farm
- There is no 'one-size-fits-all' strategy to deal with this issue as every farm is different. It will require a combination of options
 - a) Aim to produce additional silage as surplus bales on the farm. This will require additional fertilizer application
 - b) Buy silage and other alternative forages
 - c) Examine stock numbers — ask yourself if you are stocked beyond the grass/silage growing potential of the farm
 - d) Feed restricted silage and meals
 - e) Consider selling stock
- The relative value of different options will vary from farm to farm and region to region. Concentrate prices will also vary and affect relative value. Seek advice from your local Teagasc office.

Why the path to the biscuit barrel is paved with good intentions

Paul Naughton
Teagasc Food Programme

Over the last four years, Teagasc food researchers have been exploring factors that prevent and promote healthy eating.

The majority of Irish adults aspire to healthy eating but only a small minority follow healthy eating guidelines. That old cliché about the road to hell being paved with good intentions has a germ of truth to it.

Our research shows that there is a complex interplay between the factors that underlie eating habits (e.g. a busy work schedule, the abundant availability of foods high in fat, sugar and salt, etc) and how well we control our dietary decisions.

Understanding the factors driving our behaviour can help us succeed more often.

How human nature comes into this

In all aspects of life, people are motivated to make the best possible decision using the least amount of effort. For infrequent activities that entail a high cost (eg buying a car) people are highly focused on the decision.

For things we do regularly, however, habits are likely to develop which facilitate quick and efficient decision-making.

Eating behaviour and food choice is largely determined by habit rather than considered decisions. Most of the time, we do what we do most of the time.

The efficiency comes from the fact that we don't need to engage in a conscious decision-making process, it's automatic.

As humans we have a natural preference for foods high in salt, fat and sugar and considering the pressures of modern lifestyles along with the abundant availability of inexpensive palatable foods, unhealthy habits can develop quite easily.

Once formed, habits can be very difficult to break because they are 'triggered' by environmental factors rather than intentionally set



in motion. For example, a person may decide to reduce the amount of biscuits they consume (i.e. the good intention). However, when they arrive home in the evening after a hard day's work, they sit down for a cup of tea and, without a second thought, eat a biscuit. The cup of tea is a 'trigger' for eating the biscuit.

Why is it so hard to stick with a healthy eating/healthy lifestyle plan?

My research indicates that simply having a positive attitude towards

eating a healthy diet is not enough. There are many other important variables that guide eating behaviour. As well as habits, our emotional state can dictate the food we eat. If we are in a bad mood, stressed, tired, or bored we are more likely to choose the foods high in fat, salt and sugar. The foods we need to limit in our diet are the foods we crave the most. It's instinctive, impulsive and made easy because these types of foods are readily available.

Healthy eating tips

- Be wary of 'triggers'. For example, the glimpse of a TV remote may derail a plan to go jogging or the sight of a piece of cake may trigger an urge to eat.
- Take responsibility for your lifestyle choices. In other words, regain control of your eating and exercising patterns. We can think of this as bringing the unconscious (i.e. habits) into the conscious (intended/deliberate behaviour).
- Plan behaviour in advance (e.g.

eating a banana in late afternoon may reduce the amount of food consumed at evening dinner).

- Self-monitor by keeping a diary of the food you eat each day.
- Set attainable goals. For example, the goal to reduce the amount of biscuits consumed in a week is an attainable target whereas the goal to lose a set amount of weight may be more difficult to achieve, resulting in a loss of motivation to continue with healthy practices.

farm management

TEN STEPS

to get through a cash crisis

Cashflow problems are common. All solutions involve talking — with family and friends, independent professional advisers, bank managers and creditors. In virtually all situations, solutions can be found.

Fintan Phelan
Teagasc Rural Economy & Development Programme

Disastrous weather conditions, both in summer 2012 and spring 2013, are continuing to have a physical effect on farms through damage done to fields and the delay in closing paddocks for silage. Building stocks of feed for next winter will be a key challenge. Less visible on farms but potentially more important is the effect on profitability and the drain on cash.

If you find that you are short of cash

at the moment, you can be certain that you are not the only farmer in this situation, but you can also be assured that help is available. Now is the time to look at putting the farm back on a sound financial footing again and to repair some of the recent damage.

As you are aware, the repercussions from the current cashflow situation are likely to extend throughout 2013. In many cases, it may not be possible to resolve current difficulties in 2013 and a planned approach extending into 2014 may be the most prudent way of resolving problems.

Farmers should act now and involve their advisers at an early stage. Delay in taking action will only magnify the problems. Simply discussing the problem with another person starts the process of coming up with a solution.

In many cases, the underlying business is fundamentally sound and the cashflow position will recover when conditions improve. Such farms need short-term access to additional cash to tide the business over and the farmer's track record will support a



high level of confidence in paying off this short-term debt when conditions improve.

By talking this through, you can plan, negotiate and farm your way out of the current problem.

Here's how to work through issues:

1. Act early: Even the best farm plans and schedules are in need of adjustments. Delay will only magnify the problem. It will not solve it. If you believe that you will not be able to meet a repayment schedule, it is

Table 1: List of all current debt as of today, ____ / ____ /2013

	Loan name/ debtor	Current amount outstanding	Remaining loan term (years)	Current interest rate	Total repayment per year	Payments due before 1 Aug 2013
<i>Example</i>	<i>Land purchase</i>	<i>€84,800</i>	<i>7yrs 9mth</i>	<i>6.70%</i>	<i>€14,868</i>	
Term loans (incl house mortgage)		€		%	€	€
		€		%	€	€
		€		%	€	€
		€		%	€	€
Overdraft & Stocking Loans		€		%	€	€
		€		%	€	€
		€		%	€	€
Merchant Credit (including outstanding farm-to-farm debt)		€		%		€
		€		%		€
		€		%		€
		€		%		€
Hire purchase/ finance		€		%	€	€
		€		%	€	€
		€		%	€	€
Total payments						€



plan, including a forecast for the remainder of 2013 and, possibly, beyond. They have the expertise and experience to help you present tailor-made proposals to your bank and/or your merchant/farm input supplier.

It is crucial to be realistic when it comes to calculating your financing requirement and your potential to meet existing repayment schedules on time.

Table 2 shows a simple cashflow assessment sheet. If you work through this, it will help you to see if you need additional financing and how much may be required to carry you through to the first installment of the Single Farm Payment.

4. Arrange a meeting with your bank manager: Take time to prepare the appropriate information for this meeting including:

- A recent set of farm accounts/Teagasc Profit Monitor;
- A statement quantifying the effect of 2012 and 2013 weather related issues on your farm business; and
- A cashflow forecast for the remainder of 2013.

5. Maintain contact with the bank manager throughout the remainder of the year.

6. Seek an extension, if needed. For those with short-term cashflow problems, an extension to an existing overdraft facility or a new overdraft facility may be all that is required. Some may need to restructure merchant credit into a short-term loan.

7. Meet creditors: Arrange a meeting with your main input suppliers and any others you owe money to. Explain your situation and offer them

a realistic repayment schedule. Do not offer to pay more than you can afford against arrears. Look for staged repayments of the outstanding amount, without interest.

8. Delay non-essential investment or expenditure on your farm.

9. Review the main efficiency factors on your farm, identify where you can get the best return for your efforts.

10. Get what you're entitled to. In more severe cases, the farm household income will be insufficient for living expenses. Find out your entitlement to income supplements, e.g. Supplementary Welfare Allowance, Farm Assist, Carer's Allowance, etc. For more details, contact the Department of Social Protection's representative (formerly the Community Welfare Officer) or you can get application forms by ringing the Department of Social Protection leaflet and document request service on 1890 202 325.

If you are under severe financial pressure, Farm Assist may be an option. Many farmers availed of this in 2009 with the downturn in milk prices. This should be looked on as a safety net and may have a part to play in getting you over this extreme period.

If you, or your spouse, are employed off-farm for 19 hours per week and you have children then you may be entitled to the family income supplement.

After completing the application form an inspector will visit your home – if approved the payments can be made directly to your bank account.

far better to have this discussion in advance of the repayment date rather than after missing a payment.

2. Know your debt: Put together a list of all your debts, including who you owe, how much you owe, and the interest rate and term. Put this down on a sheet and include all bank repayments, all merchants, other farmers, contractor and vet. Table 1 can help you do this. By knowing this, you will not over-promise when it comes to speed of repayment.

3. Consult your Teagasc adviser or accountant: Draw up a cashflow

Table 2: Cashflow assessment

Cash out (to 15 October 2013)	Current outstanding	From today to 15 Oct 2013	Total
Total repayments from above	€	€	€
Feed and fertilizer		€	€
Contractor	€	€	€
Vet	€	€	€
Other	€	€	€
Policies (pension, etc)	€	€	€
Health insurance	€	€	€
Living expenses	€	€	€
Total payments			€
Cash in (to 15 October 2013)			
Farm sales (milk and cattle sales less expenses not included above)	€	€	€
Direct Payments (SFP, AEOS, SCWS)	€	€	€
Off-farm income	€	€	€
Child benefit, pension, Farm Assist, carers' allowance	€	€	€
Total net income available			€
Balance surplus /deficit (deficit should not exceed available merchant credit and OD limit)			€



In short

Help is available. You can talk to your Teagasc adviser, bank manager, farm organisation representative, family or friends or other organisation, e.g. Money Advice and Budgeting Service (MABS, www.mabs.ie) for help and support. The MABS national helpline is 0761072000. The first step — making contact — is often the most difficult.

Prospects are good. Despite how things look at the moment, there are positives to look towards, the most important being the current buoyant prices and optimistic outlook for agricultural products. When we return to more normal weather conditions, the current financial difficulties can be turned around through a combination of good farming and good prices.

Tone up your mental health muscles

John McNamara
Teagasc health and safety officer

Stress can be positive and taking on a challenge can shake us up and help us reach our potential. Ongoing negative stress, however, can lead to anxiety and increased risk of ill health. Many studies have found that living in the countryside can deliver a very high quality of life. However, individual situations can vary. One study in Canada indicated raised stress levels in about one farmer in eight.

Teagasc, in association with UCD, has supported a major study entitled 'Pain and Distress in Rural Ireland' with support from the HSE and the farming organisations. The IFA Farm Family and Social Affairs committee has produced an excellent leaflet entitled 'Let's Talk: Dealing with Stress'.

What is stress?

Stress is your body's way of responding to any kind of demand that makes you feel threatened or upsets your mental balance in some way. Stress is part of everyday life and can help you to stay focused, energetic, and

“ Seechange will be rolling out a month-long national green ribbon campaign in May 2013 to get people talking openly about mental health problems



alert. But beyond a certain point, it stops being helpful and starts causing damage to your health, your mood, your productivity, your relationships and your quality of life. Anyone can suffer from stress.

Signs of stress

Everyone has a different reaction to stress. Some of the more common warning signs outlined in *Table 1* indicate that it is time to manage stress and consider getting help.

Stress in farming

International studies (USA, Norway) indicate that major sources of stress among farmers include farm finances, dealing with paperwork, poor farm work conditions such as poor safety standards, excessive workload and poor health. Periods of adverse weather can make farm management difficult too. It is obvious, but true, that positive working and personal relationships alleviate stress.

Managing stress

A key approach to managing stress is to recognise the signs and respond to them. Simply having information on stress, does not — on its own — affect behaviour. Each person must realise or 'become aware' of the issues leading to excessive stress and adopt positive strategies to help manage stress.

Changes to help manage stress in farming could include changing the farming system to reduce work time or having a health check. Practical steps to manage stress might include investing in animal handling facilities (see article on sheep facilities).

Positive strategies

- **Being involved socially is crucial:**
 - Talk to trusted family members, neighbours and friends.
 - Discuss farming problems including 'paper work' with your agricultural adviser.
 - Farm discussion groups have a social dimension as well as a practical farming one.
 - Farming and sporting organisations offer valuable social networks in rural Ireland.
- **Health related goals:**
 - Have a regular health check-up. Forming this habit is crucial in the long-term.
 - Exercise regularly; being physically active is key to stress management. Farm work, however, may lead to 'strength' but not to the 'aerobic fitness' which is required for cardiovascular health.
 - Eat a balanced diet, including fruit and vegetables. Some foods such as alcohol, chocolate, coffee and soft drinks in excess can cause increased tension.

Paperwork can be a significant source of stress.



Farm stress reduction project

The Navan Dairy Discussion Group won an Innovation Award in December 2012 for their project on 'Managing Mental Health in our Discussion Group'.

The project aimed to identify the key triggers of stress experienced by dairy farmers and to develop a DIY stress management blueprint. The group conducted a week-long survey related to stress events on three occasions during the year. This allowed the group to build up a picture of the 'stressors'

members are experiencing and then to identify preventative measures to reduce the risk of stress.

The project found that the main forms of stress affecting discussion group members were categorised within: grassland management, financial management, time management, personal time. The group identified the need for farmers to focus on time, administration, personal and health management, as well as the technical challenges in running a farm.



The Navan Dairy Discussion Group won an Innovation Award in December 2012 for their project on 'Managing Mental Health in our Discussion Group'. The working documents/ checksheet of the Navan Dairy Discussion Group is available at: <http://www.teagasc.ie/topics/dairy/stressmanagement/StressManagementReport.pdf>

• Farming:

- Examine your farm for hazards and remove them.
- Organise work and plan ahead to avoid last-minute rushing.
- Examine the profitability of your farm by completing a Teagasc Profit Monitor.
- Be careful with the length of your working day. Excessively long working days can lead to isolation.

• Leisure:

- Put time aside every day for relaxation.
- Take regular breaks and a holiday from farming. These allow your mind to refresh itself.

Green ribbon campaign: May 2013

Seechange is the Irish National Stigma Reduction Partnership and has 70 partner organisations, including farming organisations. It will be rolling out a month-long national green ribbon campaign in May 2013 to get people talking openly about mental health problems.

The green ribbon campaign is about raising awareness and challenging the stigma of mental health problems. Green ribbons are distributed nationwide free of charge and are not to be associated with any fundraising activity. For further information contact: <http://www.seechange.ie/>

Table 1: Signs of stress

Physical signs	Mental signs	Behavioural signs
High blood pressure	Negative attitude	Loss of interest & enjoyment
Muscle tension	Reduced concentration	Withdrawal from friends and family
Disturbed sleep pattern	Forgetfulness and confusion	Irritability and mood swings
Weight change	Difficulty in making decisions	Increased drinking, smoking, or drug use
Reduced energy	Feeling uncertain or overwhelmed	Loss of sense of humour.

Source: IFA leaflet 'Let's Talk – Dealing with Stress'

Services available

- Teagasc and farm consultants are available to farmers nationally to advise on farm management issues. Farming organisations offer services to their members.
- The Samaritans can be contacted at 1850 60 90 90. Their website <http://www.samaritans.org> gives a list of support agencies.

- St Patrick's University Hospital, Dublin provides a support and information service staffed by experienced mental health nurses from 9am to 5pm Monday to Friday with an answering and call-back facility outside hours. You can contact the service by calling 01 249 3333

Acknowledgements: The author acknowledges use of material from the IFA leaflet: Let's Talk Dealing with Stress, with permission, in this article.

farm management

Where France leads, will Ireland follow?

The Southern and Eastern (S&E) region of Ireland and Brittany in France are comparable in terms of size, type of agriculture and soils. Teagasc researchers have compared developments in these regions between 2000 and 2010 to help understand and predict trends here in Ireland

David Meredith and Marie Rannou
Teagasc Rural Economy and Development and Programme

Between 2000 and 2010, the agricultural area in the S&E region of Ireland increased by 1.7%, whereas the area in Brittany declined by 3.7%. In Brittany, the fall in the total agricultural area was driven by a drop in the number of farms from 45,800 to 34,447 (-33%). The elderly age profile of farmers, the absence of successors and, consequently, land abandonment were key factors.

In contrast, the agricultural area in the S&E region of Ireland increased between 2000 and 2010 by 1.7% (from 2,508,151 to 2,549,572 hectares), while the number of farms actually fell by 1.4% to 65,979.

The rapid decline in the number of Brittany's farms was matched by an increase in average

area, from 33.2 to 47.6 hectares. The average farm size in the S&E region of Ireland increased by only 1.1 hectares (from 37.5 to 38.6 hectares) over the same period.

As of 2010, half of the farms in the S&E region were less than 30 hectares and just over 3% of farms were of 100 hectares or more.

In Brittany, 40% of farms were smaller than 30 hectares and 10% owned 100 hectares or more.

Evolution of farming systems between 2000 and 2010

Although their number has fallen by 35%, dairy farms remain the dominant farm type in Brittany. Nearly four out of 10 farms are involved in milk production. Interestingly, the number of dairy producers in the S&E region also fell by about one third over the period from 2000 to 2010.

In 2010, beef production was the most common farm enterprise in the S&E region, and is the only type of farm enterprise to record an increase. This was driven by smaller dairy and sheep producers switching to beef production. In many instances, these farmers took an off-farm job.

In Brittany the number of beef enterprises declined by 36% as the size of farms rose and the number of dairy produc-

In 2010, beef production was the most common farm enterprise in the S&E region, and is the only type of farm enterprise to record an increase.



ers increased as a proportion of total farms. These developments have been accompanied by increases in stocking densities. Sheep and poultry producers fell by 63% and 74% respectively in Brittany and 31% and 17%, respectively, in the S&E region.

Stocking densities in the S&E region, by contrast, declined between 2000 and 2010; as farmers shifted to lower labour systems combined with an off-farm job. The trend in dairy cows per farm is comparable in both regions (+46.7% in southern and eastern Ireland and +44.8% in Brittany). Dairy farms in the S&E region have 60.4 dairy cows versus 49.5 in Brittany.

In 2010, Brittany had more intensive poultry and pig farms, while south-



Although their number has fallen by 35%, dairy farms, like this one, remain the dominant farm type in Brittany. Nearly four out of 10 farms are involved in milk production.

ern and eastern Ireland had more intensive dairying and sheep farms.

Conclusion

The S&E region of Ireland has not seen anything like the drop in farm numbers and corresponding increase in farm size which occurred in Brittany. This is due to a combination of an aversion to the sale of land among Irish landholders and the continued availability of off-farm income to farm households.

Partnerships have played a key role in increasing the scale of farms in Brittany.

This model must surely be worth promoting strongly in Ireland, if young farmers are to be encouraged and output increased.

Figure 1
Number of farms as percentage of total classified by size, 2010

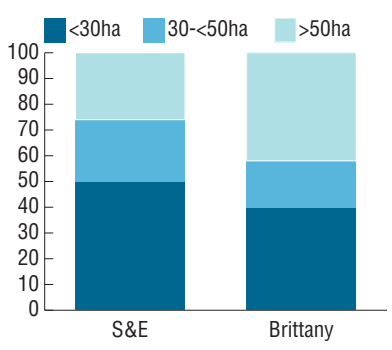
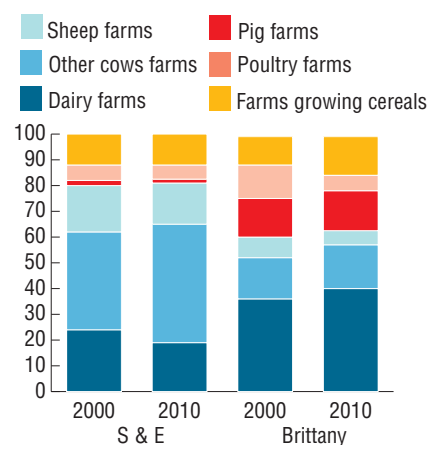


Figure 2
Repartition of farm type (%)



dairying

Dairyman delivers

This transnational project is helping farmers drive down costs in dairying.

Mark Moore reports

Johan Dekker is a typical Dutch farmer. He is unassuming, exceptionally polite, technically excellent and can speak English with less of an accent than I do. Johan farms 170 cows on 50ha at 4.5m below sea level on the polder near Zeewolde. Together with a group of farmers from Holland, Johan recently visited a number of farms, Carbery Co-op, and Teagasc Moorepark as part of the Dairyman project.

"The Dairyman project links 127 dairy farms, researchers and advisers in Belgium, France, Germany, Luxembourg, Northern Ireland, Ireland and the Netherlands," says Teagasc Dairyman project co-ordinator Andy Boland.

"The aim of Dairyman is to study the sustainability of dairy farms in the north-west of Europe in terms of economics, greenhouse gas emissions and nutrient use efficiency, as well as energy use.

"As part of the project, farmers are encouraged to visit their colleagues to learn and share information and personal experiences of dairying. Findings from the EU-supported project are widely publicised."

Farm infrastructure

"The Dutch farmers were taken-aback when I told them I have well over a mile of internal roads

on the farm," says Cyril Draper, who farms with his wife Edith near Enniskeane in west Cork. Cyril's internal roads and paddock management are exceptional by any standards. Cyril is a member of the Bandon Young Discussion group, facilitated by Teagasc Advisor, Tom Curran.

"As part of the programme, I've been to a number of farms on the continent and it's good to learn from foreign farmers," says Cyril Draper. "In turn, they visit you. I often feel a few butterflies before talking to a group but once the discussion gets going it's very enjoyable. You can also learn from the questions you are asked by visitors."

"Cyril has 180 cows and his farm is comparable to mine in many ways with two key differences," says Johan. "The cows graze outdoors and the land is slightly hilly." The maize and grass, which make up the bulk of the ration on Johan's farm, are cut from land as flat as a snooker table and brought to the cows.

"At the moment, our cows are indoors all year round," says Johan. "Until about 30 years ago, cows grazed the fields in Holland but, gradually, it became more efficient and cost-effective to zero-graze the animals. At that time, the average herd size was a lot lower and we really don't have any recent experience of grazing large herds outdoors. That's why Cyril's paddock management is so interesting for us."

Dutch farmers are going back to grazing, thanks to a combination of incentives and cost increases. "Dutch consumers are keen to



see animals grazing outside and the milk processor offers an extra 0.5c/l for cows grazing outdoors," says Johan. "To get the bonus, the cows have to be out for at least 120 days/year and at least six hours per day.

"The ever increasing cost of energy is also a consideration. When cows are grazing, we don't have to harvest feed and there is less slurry to cart around. But we might have to teach the cows to graze!"

Efficient with electricity

The itinerary for the Dutch visitors included a visit to John Joe and



LEFT: Cyril Draper (with microphone) and Johan Dekker (right).



Cyril Draper hosts a group of fellow Dairyman farmers from Holland.

Theresa Sullivan at Roscarbery, also in west Cork. John Joe's farm, in common with 21 other farms in the Dairyman programme, is being closely monitored for electricity usage across all aspects of milk production.

"We have a power meter on the farm, which collects the electricity usage for milk cooling, water heating, vacuum pumps and lighting," says John Joe. "The information is sent via a wireless modem to John Upton at Teagasc Moorepark."

John Joe receives feedback on how his energy usage compares with that of his foreign colleagues. "At 22.9l/ha, our diesel usage compares with a group average of 40.6l/ha," he says. "Our electricity use at 64 kWh/t milk is also a bit lower than the average of 87."

While grazing management and

electricity usage were two high points for the Dutch visitors, the Dairyman project has a broad remit. Addressing the Dairyman farmers, Prof Gerry Boyle, Teagasc director said: "Dairyman is all about driving sustainable intensification. All of the factors that drive efficiency in dairy farms also deliver positive outcomes in terms of the environment."

Example

"An example is that on Irish dairy farms we have reduced usage of artificial nitrogen by 30% from its peak in the last few years.

"That has had a real benefit for farmers in terms of profitability but it has also had obvious benefits for the environment."

"The information that Irish farmers get from Dairyman about farming sys-

tems in other EU countries is helping them to take decisions that will make dairy farming sustainable in the long term," says Andy Boland.

"And the success of the original Dairyman project has now led to further spin-off projects on Irish farms over the last 18 months. For example, the new Carbery Greener Dairy Farms project started with Carbery Group milk suppliers."

"The individual challenges we have, as dairy farmers, might be a bit different," concludes Johan Dekker.

"But the struggle to keep costs in check and remain environmentally sustainable is common to us all."

• The Dairyman project is funded by INTERREG IVB North West Europe (NWE).

TEAGASC DAIRY MANUAL

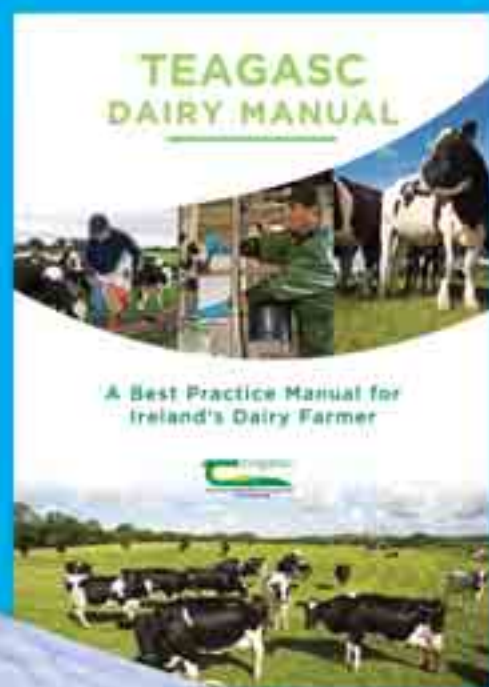
A comprehensive source
of practical advice
for any dairy business.

- Why dairy farming?
- Business management
- Dairy facilities
- Dairy farming and the environment
- Milk quality
- Feeding dairy animals
- Dairy breeding
- Dairy animal health

These sections are further divided into a total of 49 chapters with titles such as: Creating a Business Plan, Winter Facilities, Feeding the Dairy Cow, Managing Your Grass, Replacement Heifer Management etc.

The information within each chapter is built on feedback from farmers and is laid out as Questions and Answers, How-to's, Key Performance Indicators, Key risks, etc. making the Manual extremely easy to read and use. The Manual will be of particular interest to anyone planning to expand over coming years.

A must for anyone with an interest in dairy farming the 310-page Manual is produced using tear-proof, water-proof paper for real world conditions.



The Teagasc Dairy Manual is available from your local Teagasc office (**clients €25, non-clients €50**). Alternatively contact **Alison Maloney (059 9183409)** who will send you a copy by post (**p&p €7.50 extra**).

New entrants thriving on dairy challenges

Since 2009, non-dairy farmers have been able to compete for milk quota under the DAFM new entrant scheme. Though few in number, these pioneers are likely to be followed into dairying by many others once quotas are lifted. Achieving the ambitious national milk production targets under FoodHarvest 2020 depends on it.

Roberta McDonald, a Teagasc/UCD Walsh Fellowship PhD student, based at Moorepark, who is working with new entrants to identify the unique challenges of beginning milk production, reports



By the end of 2013, over 400 new dairy farmers will have each received up to 200,000 litres of milk quota under the DAFM scheme. The majority were previously beef and or sheep producers.

A 'new entrant group' was established in 2012 to share physical and financial performance information and identify the challenges experienced in developing a new dairy farm enterprise.

The group includes 10 new dairy farmers from seven different counties. All began dairying between 2009 and 2012. Despite the distances involved, the group meet regularly on each others' farms for often animated discussions on technical and financial issues.

Group member John Payne studied at Harper Adams College before returning home to the family drystock farm in Moydow, County Longford.

"In 2008, I was at a Teagasc event in Athenry and met Teagasc dairy specialist George Ramsbottom who convinced me that there was a better future in dairying."

Today, John has managed to build up a substantial quota thanks to the DAFM scheme and also by purchas-

Continues >> page 26



I was at a Teagasc event in Athenry and met Teagasc dairy specialist George Ramsbottom who convinced me that there was a better future in dairying

Empty Water Troughs?




Terra | Services

Water Systems Specialists

Upgrade or Design Farm Water Systems
Installed 24" Deep with Minimal Ground Disturbance

We SUPPLY and/or INSTALL

- MDPE (blue) Pipe – Up to 3km coils
- Full range of blue/black pipe fittings (up to 40% cheaper)
- Apex NZ Full-flow ballcock
- Concrete water troughs (used/rebuilt)

See
www.waterfittings.ie or www.terraservices.ie
 Contact: Tom 086 8510872 or Padraig 087 3165174



ing quota. “This has been easier in the Connacht Gold region than in other areas,” said John.

He farms with his wife Jasmine on 80 hectares, about half of which is rented. Post-2015, John aims to be milking three cows per hectare on this land.

“It’s hard work in the first few years but there’s good support available in groups like this one, and the training days which were part of the DAFM scheme were really useful too,” he said. “It’s great to be able to compare notes with other people in a similar situation.

“I’m happy with the progress we’ve made and I strongly encourage my friends who are in drystock to consider dairying. It’s a big step and you need to think a lot about going into cows. But I’m enjoying it now.”

So what are the main challenges for new dairy farmers?

Dairy farm expansion is not for the faint hearted. As well as the significant workload associated with developing and running a new dairy enterprise, cashflow can be extremely tight and there’s also the technical challenges such as managing grazing pastures to achieve high animal performance.

Developing a broad skill-set, which includes animal breeding and financial management and recording skills, for the new dairy unit over a very short time period requires cour-

age and exceptional openness to new ideas.

Large scale dairy expansion also demands significant expenditure and technically excellent systems which are entirely profit-focused and highly efficient per unit of land, labour and capital.

The vast majority of new entrants immediately adopt grazing management, animal breeding and financial planning technologies to quickly maximise the performance of these new farm businesses.

Ian Wharton farms near Buttevant in Cork with his wife Jane. He started dairy farming in 2009 when milk prices slumped.

“It was a tough year for everyone but, as new entrants, managing cash-flow and staying within budget was a real challenge,” said Ian, who is about

half-way to his target of around 100 cows and still has land in tillage and drystock.

“We love punishment,” he says smiling. “But seriously, we had a reasonably good Single Farm Payment but we are concerned as to whether it will always be there. Getting into dairying certainly took us out of our comfort zone but we are glad we made the move.”

The results of our study show that farm performance typically dips during the development phase. *Table 1* highlights the group performance from 2012 compared with the average and top 10% of dairy farmers based on the 2012 profit monitor.

Unsurprisingly, group physical, and consequently financial, performance is below the levels achieved by established dairy farmers, as new entrant

Table 1: The physical and financial performance of the new entrant group compared to the top 10% of dairy farmers based on 2012 profit monitor

	New Entrant Group	Average	Top 10%
Stocking rate (cows/ha)	1.83	2.11	2.26
Herd size (No. cows)	90	91	99
Milk yield (litres/cow)	4,660	5,019	5,142
Milk solids (kg/cow)	364	386	403
Variable Costs (€ cent/l)	12.9	13.0	10.3
Fixed Costs (€ cent/l)	12.4	9.7	7.3
Net Profit (€ cent/l)	7.9	11.5	19.2



Ed Payne and Roberta McDonald at a New Entrant Discussion Group meeting in Longford.

“I’m in my mid-40s and I would have got into dairying 10 years ago if the opportunity had been there,” says Philip. “The DAFM new entrant scheme gave us the chance to start. We had been doing Teagasc profit monitors on the beef and sheep for a number of years, and when you compare the returns with dairying, there’s a vast difference in profitability.”

Philip supplies Drombane Co-op and has purchased quota which has allowed him to build a herd of 70 cows. His target is to reach 110-120.

“The new entrant group is really

good because we are all at roughly the same level of knowledge. In a long established group, we’d be at a big disadvantage.”

Although, the transition to dairy farming is difficult, the group are enjoying the challenge and none have any regrets about making the move to dairying.

• **New Entrant Scheme applications will be taken until 7th June 2013.**

• **Acknowledgements: We would like to thank the new entrant focus group for participating in project and AIB for funding this research.**

Visit the New Entrant Marquee at Moorepark'13

• If you are considering becoming a dairy farmer, you can come and meet Roberta, John, Ian or Philip and the other new entrant group members at the Teagasc New Entrant Marquee, at the Moorepark Open Day on 3 July. The new entrant group members will chat with anyone who is interested in getting into dairying themselves or would just like to hear their experiences in setting up a new dairy farm.

• AIB representatives will also be present, giving farmers the opportunity to ask questions and learn about the importance of financial planning and debt servicing capacity on farm.
• In addition, Macra representatives will be present to discuss their role in supporting young farmers and increasing awareness of such ventures for young and new dairy farmers.

herds are typically developing and these farmers are between one and four years into their dairy business venture.

The lower financial performance of new entrants is explained by low animal performance and the high fixed costs associated with developing the new farms.

The group are highly motivated to improve animal performance and reduce costs in future years by improving their grazing skill-set and rapidly increasing the economic breeding index (EBI) of the dairy herd to improve production and profitability.

With every additional year of experience, the businesses are improving as each farmer’s management capabilities increase. The longer term outlook for these new technically-oriented businesses is extremely positive.

Why should you consider entering dairy?

Dairying is the most profitable agricultural enterprise in Ireland today, and the overall outlook for the sector is positive. Irish dairy farmers, by virtue of our traditional grass-based systems, have a distinct advantage over other production systems due to our capacity to produce high quality product at comparatively low cost.

Philip Dwyer and his wife Paula farm at Ballycahill, near Thurles, Co Tipperary. The farm was previously in beef and sheep.



I’m in my mid-40s and I would have got into dairying 10 years ago if the opportunity had been there

Is it time you upgraded your scraper system....

CleanSweep

- Superior construction.
- Hydraulic hoses incorporated in protective ducting.
- SpaceSaver stainless steel rambox.
- Outstanding flexibility.
- Low maintenance.
- Easy to operate.

Improving herd health & saving you time

100% IRISH

Call: 1890-500-24-7

Distributors Nationwide - www.dairymaster.com

Milking - Feeding - Slurry - Cooling - Heat Detection

drystock

More production, less hardship

Teagasc Ballinrobe adviser Gerry Murphy says improved facilities and better ways of working can allow sheep farmers to get the same output, or greater, with much less effort



Mayo sheep producers are highly progressive and there are already 22 STAP groups and a number of marketing groups in the county. But Vincent Ronayne and Agricultural Catchments adviser Noel Meehan and myself have noticed that many farms could benefit by upgrading their sheep facilities.

Once facilities are in place, long-term planning and preparation really pay off and you can greatly reduce your work peaks and overall workload. Part-time farmers often stand to gain the most.

Stock proof fencing

Rotational grazing, management at weaning, restriction of ewes post weaning and control of rams all hinge round good fencing. Well-hung gates with close bars are ideal. Creep gates will allow forward creep grazing.

TAMS can help fund improved fencing. There's 40% grant aid on sheep fencing plus rebate of VAT, and the remainder can be written off against tax. This puts good fencing within reach of sheep farms with over 50 ewes. Grant aid for field gates as part of a new fence encourages subdivi-

sion of larger fields, leading to better grassland management.

Well-designed handling unit

Inadequate handling facilities on sheep farms fuel the view that sheep farming is highly labour intensive. Good design reduces time spent doing jobs, allowing the unit to be a one man show. A good handling unit can free up 1.2 hours/ewe/year.

Guillotine gates front and rear of the race, an integrated footbath, rollover crate and scales and two-way drafting gates reduce handling times and difficulty.

The unit should include a gathering area, circular forcing pen, narrow working pen, a race and footbath and may include a dipping unit.

Where the farm is fragmented, part of the unit can consist of demountable gates, which are easily transported elsewhere for routine flocking, dosing etc. Again, TAMS funding covers many of these items including race, footbath, rollover crate, weighing scales and up to 75m of mobile penning. The latter can be used on an outfarm and within the lambing unit in springtime.



ONE MAN AND HIS DOG

A well-trained sheepdog eliminates the need for two-legged help. Today's dogs are highly bred animals and your average farmer has limited skill in training a dog. In most cases, the fault lies with the trainer rather than the dog.

The options

- You could buy a trained dog. Expect to spend anything from €800 to €1,500 for a well-trained animal. Considering that his effective working life is six to eight years, barring accidents, it is only an investment of €3 per week. Viewed as a labour saving device or spread out over a flock the cost is a pittance. Buy from a reputable trainer and, for your first dog,

perhaps you should stay local.

- The alternative is to buy a pup or young, untrained dog and bring him on yourself. This option has many advantages provided you can train the dog.

Many breeders of good sheepdog pups are themselves accomplished trainers. They may be willing to give you some lessons or start you off on the right foot.

Well-known Roscommon retired Teagasc Adviser and dog handler Eamon Egan has run many courses throughout the country designed to train handlers and their dogs. They consist of six sessions spread over 12 weeks.

Eamon assesses both dog and handler

and works on each individual's weaknesses and strengths. Specific advice and work to be done for the next session gives the handler a blueprint for the next two weeks. Initially, the work is done in a confined paddock, where the dog is easy to control and the sheep movements are curtailed. Once the dog and handler get more competent, lessons can move to a larger field.

There are four basic commands to control and work your dog. Once the dog and handler understand these, then the rest is simply a matter of refinement.

Being able to work your own dog leaves you relaxed, independent and truly in control of stock.



Tips to reduce workload



Good fencing and handling facilities can dramatically reduce the need for labour in sheep husbandry.

- **Dosing:** Dose strategically rather than routinely. Could cobalt be given by mineral or feed bucket cutting out the need for dosing every two to three weeks?
- **Disease prevention:** Prevent diseases with vaccination (Clostridia, pasteurella, orf, toxoplasma, enzootic abortion and E.Coli.).
- **Footbath:** Routine foot bathing will reduce the time spent handling and treating for scalds and foot rot. This can be done in conjunction with weighing, dosing, etc.
- **Dipping:** Pour-ons can be much quicker and act for longer than dipping for fly strike. Injectables will control sheep scab while also treating for worms.
- **Combine tasks:** Use one gathering to weigh lambs, dose for worms, cobalt drenching and footbath ewes and lambs.
- **Reduce handling:** Select and separate ewe lambs for breeding, at weaning, so that they are not gathered at each weighing. Reduce the number of lambs for weighing by separating into heavy (over 35kg) and lighter groups.
- **Marketing:** Marketing lambs through a producer group reduces time and cost spent transporting and selling lambs. Aim for a definite 'cut off' date, where all lambs are sold and you are left with just the ewe flock.
- **Shearing:** Winter shearing, if lambing in March, can help spread workload. Erecting 'scratching posts' helps to prevent ewes going on their backs, reducing the need for shepherding.
- **Reducing work indoors:** Consider re-designing the sheep house for a one-man feeding system. Slatted tanks remove need for straw. Building up a bank of grass in autumn can mean a shorter indoor wintering period. Concentrate feeding of early lambing ewes removes the need for roughage. Flat rate feeding cuts down the need for twice-a-day feeds.
- **Reduce lambing spread:** Use the 'ram effect' for compact mating. Sponging might be useful, especially in smaller flocks. Have a definite 'cut off' date for the ram.
- **Lambing:** Ensure that there are sufficient individual and group pens. Prepare a well-stocked lambing kit well in advance.
- **Scanning:** Aids feeding.
- **Castrating and tailing:** These tasks can be done before lambs leave the shed. Dosing of ewes post lambing could take place at this time.
- **Good records:** The basis of good planning, which saves time.



A well-trained sheepdog eliminates the need for two-legged help.

drystock

Breeding is the key

For these weanling producers, superior genetics is key to increasing the value of their output.

Mark Moore reports

It's mid-April and members of the Tulla/Broadford BTAP discussion group are due to arrive any minute. Host and currently chairman of the group, Sean Hayes, is laying out buns decorated with fancy icing. With a smile Sean identifies group member Donal Consadine as having started this tradition. With a biting east wind, all 18 group members are glad of the foam cups of steaming hot tea and the banter begins to flow. It's all hurling here in east Clare.

Teagasc adviser Conor O'Reilly gets the meeting started by 'going round the table' to ensure that members are on track with their obligations under BTAP. Soon, attention turns to all aspects of the host farm. An eight-page 'hand-out' with background info prepared in advance by Conor and Sean is supplied to members. Breeding, in particular, is the focus of this meeting.

Like virtually all members — Mike Murphy of Clooney is the only cattle finisher — Sean produces calves which will be born in autumn or spring and sold as top quality weanlings for the domestic or overseas markets.

Sean farms about 45 hect-



ares, which is in two blocks. Twenty suckler cows calve in July/August and 40 calve from December to February. Group member Tadhg Halpin explains that farmers in east Clare were forced to switch to some autumn calving because a glut of weanlings

from spring calvers in key markets like Ennis was driving down prices.

Genetics

"Sean has always been exceptionally focused on genetics and breeding," says Conor O'Reilly. "So, it's particularly appropriate that his turn to host comes at this time of year. He really started focusing on the genetics of his cows seven or eight years ago, so he has a really deep knowledge of the performance of his animals, their individual genetic merit and their complete ancestry."

The 60 suckler cows are mostly a mix of Belgian Blue, Limousin and Charolais blood. "From generation to generation, Sean's cows are improving in genetic merit," says Conor O'Reilly. "Sean's skill has been to match the right bull to the right cow so that he's not ending up having to deliver calves via Caesarian section."

Sean's breeding strategy involves the use of a high quality Charolais stock bull and AI. As a trained AI operator, Sean is able to inseminate cows himself. Asked if it's worthwhile getting trained up (with the cost estimated at €1,200 for the AI



Conor O'Reilly and Sean Hayes.

in Tulla/Broadford



The Tulla/Broadford BTAP discussion group.

more efficient progress with breeding.”

A pen of 15 yearling heifers attract the group and Sean explains that he bought the animals in October and plans to grow them on and sell them as stores — a small, side venture which he feels may yield a modest profit.

“But the beauty of the HerdPlus system is that I can find out the genetic merit of these animals and if it so happens that I like the look of them and they also have the right genetic merit I might keep one or two as replacements.”

Focus on the ‘bottom line’ is a key feature of any progressive group and the Tulla/Broadford group were all enthusiastic to complete a Profit Monitor and are ready to share the results. With gross output at €946/ha and gross margin at €450/ha, Sean Hayes’s figures are good but he believes that they can be improved further.

“The aim is to sell more kilos of beef per livestock unit,” says Sean.

“That’s why we focus so heavily on genetics — the better the quality of the weanlings, the more they will be worth.”

Traditions

The Tulla/Broadford group has built a number of traditions beyond tea and buns. They occasionally invite vets or commercial technical people to address the group at the end of BTAP meetings.

They also make several trips each year to ‘open days’ or events. Last year, a visit to the Teagasc farm at Solohead was followed by the group’s Christmas dinner.

Mike Murphy is a cattle finisher and, therefore, aspects such as breeding are of limited benefit to him but he still attends all the meetings. “I get plenty out of the group,” he concludes. “It’s worth it for aspects such as grassland management, there’s a great spirit in the group and Conor keeps us on our toes.” The buns are pretty good too.



Sean’s skill has been to match the right bull to the right cow so that he’s not ending up having to deliver calves via Caesarian section

training course and liquid nitrogen storage tank), Sean acknowledges the benefits but points out that if you are inseminating a relatively small number of animals, it may be better to leave it to the AI companies.

Most members of the group do not use AI and Sean too relies on his stock bull for most cows but knows the EuroStar rating for every trait. “In the past, I had a number of Belgian Blue stock bulls and I’ve gone back to a Charolais to get a slightly larger framed calf,” he says.

Replacements

It’s Sean’s policy for breeding replacements that really catches the attention of the group.

“My aim is to produce the majority of replacements from within the herd and I always use AI on the cows I want to breed from. I’ll select from one of four or five bulls, depending on their traits and the traits of the mother,” says Sean.

“We’re looking forward to the arrival of reliable sexed semen,” says member Matt Murphy who also uses AI.

“That would allow us to make even

TOP 5 RANGE

— THE LEADING RANGE OF GRASS SEED MIXTURES —



INCREASED
SWARD
DIGESTIBILITY

INCREASED
DM INTAKES

**TOP 5
EXTEND**

INCREASED
SPRING
GROWTH

INCREASED
MILK YIELDS &
MILK SOLIDS

ABERGAIN

KINTYRE

ABERCHOICE

DRUMBO

TYRELLA

DUNLUCE

ABERGAIN, KINTYRE, ABERCHOICE, DRUMBO, TYRELLA
and DUNLUCE are in the Top 5 Range and available
nationwide from all Co-ops and Agri merchant stores.



The secrets of success in



Unlike the majority of producers in the Teagasc/Irish Farmers Journal BETTER Farm Beef Programme, Sean Power of Woodsgift, north Kilkenny, operates a trading beef system.

Peter Lawrence
Programme adviser

When I was producing my three-year farm plan with Terry Carroll and members from the BETTER Farm management team, we identified key objectives for the farm," says Sean Power. "They are to increase stocking rate and output of beef cost-effectively, by making better use of grass, and improve farm cashflow by having heifers available to slaughter almost all year round."

Sean and his family farm 116ha, all in grass (98ha for cattle and 18ha for a 130 mid-season ewe flock and a store hogget enterprise). The land is in five blocks, the furthest five miles from home. Two-thirds of the land is free-draining limestone – the rest is heavier clay and more prone to poaching.

Buying cattle

Before starting to farm full-time, Sean spent several years working as a procurement manager for a meat factory. "That was the best education I could have gotten, in terms of understanding how a trading beef system operates," he says.

Sean purchases most of the cattle himself from local marts and aims to get to the mart at least two days per week, so time management is a crucial element in managing this beef system.

"Farmers have very little control over the price they get from the factories," says Sean. "The areas where we have at least some control are the price we pay for animals and the money we spend feeding them."

Sean believes that purchasing and killing heifers almost all year round, together with his skills as a buyer, will reduce the risk of buying high and selling low.

"Even a couple of bids too many in the mart can dramatically reduce the



Peter Lawrence and Sean Power.

Table 1: Benchmarking Sean Power's beef production system against the top 1/3 of Teagasc e-PM non-breeding cattle farms

	Top 1/3 Teagasc e-PM 2011 non-breeding cattle farms	Sean Power e-PM results	
		2011	2012
Physical Performance			
Farm Size (Ha)	55	98	98
Stocking Rate (LU/Ha)	1.90	1.90	1.84
Liveweight produced (Kg/LU)	565	258	317
Liveweight produced (Kg/Ha)	1,073	490	584
Financial Performance (€/Ha)			
Gross Output Value	2,423	1,221	1,282
Variable Costs	1,310	546	575
Variable costs % of Gross Output	54	45	45
Gross Margin	1,113	675	707

a beef trading system

potential profit on an animal," says Sean. "Most farmers buy and sell infrequently and it's hard to be an expert at something you don't do every day, or even every week."

Sean purchases approximately 260 yearling heifers each year, weighing between 300kg and 350kg. They include both late and early maturing cross-bred heifers with some having dairy genetics also. Heifers are finished under 30 months of age at 560kg liveweight (300kg carcass weight) with the majority grading as Rs.

To date, approximately one-third of the heifers have been purchased between February and April, and the remaining two-thirds later in October to December. Generally, 50% of the heifers are finished off grass, starting from June through to October, as they become fit.

"I follow a rotational grazing system which groups the heifers in batches of 50 by age, weight and body condition score, so we can easily manage and identify heifers that are near to slaughter specification," says Sean.

Finishing

At about four weeks prior to slaughter, Sean selects and assembles a group of heifers within 30kg to 40kg of their slaughter weight and supplements them with 3kg of concentrates at grass. Similarly, during the winter housing period, he groups the remaining heifers by age, weight and body condition score.

The most suitable heifers for slaughter are then placed on a finishing diet of first-cut grass silage and 3kg to 4kg of concentrates for 60 days. These heifers are generally slaughtered between January and March. The feed cost per day during the finishing period

outdoors is considerably less than that during the finishing indoor period (approximately €1.60 vs €2.60) and Sean hopes to exploit this feed cost saving by slaughtering more heifers from grass during the



Sean's top tips

- Go regularly to a number of marts, even if you are not 'in the market' for cattle, to get a 'feel' for the market and how it operates.
- Do your homework. Make an educated guess about your feed costs and likely factory prices so that you know exactly how much you can pay for cattle and still make a profit. The skill of a trader is in knowing the true value of something and buying when prices are low.
- Be ready to act if a bargain presents itself....try to have cash or credit and

transport available in case cattle are on sale at a very good price.

- Be willing to walk away if prices are too high.
- Beware of 'ring fever' – the feeling or desire to buy something at almost any cost.
- Don't allow yourself to be 'bid up' by regular buyers who may wish to scare off a newcomer.
- Don't allow your ego to influence your actions. There's no point beating another bidder if you end up with over-priced cattle.

course of the programme.

Approximately, 350 store hogget lambs are purchased in local marts each year from October to December and, depending on grass availability, most are finished off grass between January and early June. The store lamb enterprise complements the beef enterprise late in the grazing season, as the sheep allow Sean to graze out the wetter paddocks without causing poaching during wet periods when closing up for spring grass.

Stocking rate

In 2011 and 2012, Sean's stocking rate was running on the upper end of the scale at 1.90LU/ha and 1.84LU/ha respectively, and this places him among the top third of non-breeding farms in the 2011 e-Profit Monitor analysis.

The aim during this programme is for Sean to increase his stocking rate up to 2.5LU/ha and this will hopefully see him finish close to 500 heifers during the year. This will entail dropping sheep numbers to make more land available for the increase in cattle.

"To carry the extra stock, I'll have to finish heifers younger (22 to 24 months) and finish more out of the shed during a shorter, more intense, finishing phase during the year to allow for the increased through-put of animals," says Sean.

Sean's gross output (kg of beef produced) in 2011 and 2012 was 490kg/ha and 584kg/ha, respectively, which is just below the average of 699kg/ha in 2011 e-Profit Monitor analysis.

This is mainly because of the type of heifer that Sean buys. He is not in the market for high quality E or U grading heifers that would yield more meat but would cost considerably more to purchase.

Animal performance at grass will be a key factor in driving this system forward and making weight gain cost efficient. "Since joining the programme, I've focussed more on grassland management skills," says Sean. "This means grass measuring and budgeting, setting up more paddocks on the farm and installing more water troughs to allow greater flexibility if paddocks are to be sub-divided at different stages during the year."

Soil fertility

As Sean hopes to grow more grass to accommodate the extra stock, soil samples were taken this spring. Results indicate deficiencies in soil pH and phosphorus.

Sean has spread two tonnes of lime per acre where needed and will now spread 18-6-12 fertilizer to build phosphorus levels up to index 3 to help improve grass growth yields. Poor under-performing paddocks with low proportion of ryegrass within the sward or high weed infestations will be reseeded over the course of the programme.

"It's all about trying to influence the areas you can control," Sean concludes. "Soil fertility, the amount of grass in the animal's diet and, most importantly, the price you pay for the animal are all in your hands."

A TEAGASC/IRISH FARMERS
JOURNAL INITIATIVE, SUPPORTED
BY INDUSTRY SPONSORS:



tillage

Fungicide returns still fabulous

Data from 2012 shows that even in a bad season fungicides are crucial. Careful management will optimise returns

Michael Hennessy,
Crops Environment and
Land Use Programme

Met Éireann records show that solar radiation levels reaching crops were down by between 13% and 22% in 2012 compared with 2011. This may also have contributed to the difference in grain filling, which started 10 days later and was two to six days shorter than 2011. But what part did fungicides play in the lead up to, and during, the grain filling period? And what was their contribution to final yield?

Research by John Spink and his team at Oak Park throughout 2012 sheds light on these questions.

From *Figure 1*, you can see increased yields from a single spray at each of the main timings in winter wheat. The yields from a single spray over the untreated were: 1.61t/ha at T1, 2.56t/ha at T2 and 1.39t/ha at T3.

If we cost each fungicide application at €66/ha and grain at €175/t, then the payback (return for each euro spent on fungicides) at each timing is as follows: T1 =4.2:1, T2 =6.7:1 and T3 =3.7:1. This shows the potential return from a single application only but, more importantly, shows the huge benefit from fungicides generally.

Typically, growers apply three fungicides to winter wheat and expect to get between 3.5t/ha and 5t/ha compared with the untreated.

Spring barley

The benefit from a two-spray fungicide programme on spring barley in 2012 trials was 1.8t/ha. Costing the fungicide programme at €75/ha and grain at €165/t, the payback (or return for each euro spent on fungicides) was 4:1. In other words, for €1 spent on fungicides in these trials, the subsequent return was €4 of grain.

The next question is, how can we maximise this benefit from the fungicides used? I will focus on spring

barley as it occupies an even larger percentage of overall cropland this year.

Generally, spring barley is behind where you would like it to be at this time of the year but the crop will race through the growth stages this year and harvest date for these crops will not differ greatly from normal.

High yields

Maximising the numbers of grains per square metre is the key to high yield. Barley cannot compensate by increasing grain numbers per head, to the same extent as wheat. Consequently, a high yielding crop needs high head (shoots) numbers per square metre.

The best chance a grower has to influence these tiller (or shoot) numbers is generally before stem extension. Maximising tiller numbers involves good seed, seed beds, nitrogen (plus other basic nutrients and trace elements) and other factors, such as pest control, plant growth regulators and disease control.

Disease control is important as a severe attack of disease at early tillering stage can kill tillers, decreasing the eventual number of heads and reduce yield.

Fungicide timings

When focusing on spring barley disease control, we must look to research, which has shown that spraying four times during the season will not yield any more than a two-spray programme.

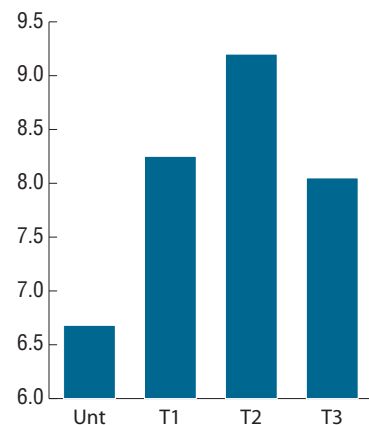
Research also shows that returns tend to be greater at the second timing (flag leaf to head emerged) compared with earlier timings (but not always). If disease attacks a crop in its early growth stages, returns from controlling the disease often outstrips disease control later in the season.

Varieties with good disease resistance (Rhyncho/net blotch), such as Quench, Propino or SY Taberna, can be managed using two reduced rates at both fungicide timings. Higher rates may be needed (depending on the season) on Snakebite for Rhyncho and Azalea and Cocktail for net blotch at an early stage.

This may mean spending 50% of total fungicide spend when controlling disease early and reducing the spend on the final application.



Figure 1
Yield effects of spray timings in winter wheat (t/ha fresh)



Follow the tillage team on Twitter
[@TeagascCrops](https://twitter.com/TeagascCrops)



When focusing on spring barley disease control, we must look to research, which has shown that spraying four times during the season will not yield any more than a two-spray programme.

Products to use

There are many products which can be used at each timing and, due to the sheer volume of products available, this article will not be able to mention them all.

The first fungicide can be applied from mid to late tillering but it is generally applied before the first node detectable stage. Half rates are generally sufficient. Products like Proline (prothioconazole), Punch C, Lyric, Stereo, etc, will all do an excellent job.

Where Rhyncho is a problem early, use Proline at a higher rate (60%+ rate of a full rate of prothioconazole), as it has the best curative activity on Rhyncho of the products mentioned. Where net blotch is a problem use higher rates of Proline and the addition of strobilurins (Modem, Galileo, etc).

The second fungicide application (T2) will coincide with the 'awns visible' stage. Triazoles form the cornerstone of disease control at the T2 timing. Barley is generally able to produce more green leaf or starch producing capacity than it can store in the grain. This means for most crops, apart from those with a very high tiller number, keeping barley green for longer will generally not result in extra yield. Therefore a good, but not over the top, final fungicide is appropriate.

Product choices include Siltra, Bontima, Barley Pack, Fandango, etc. Other alternatives can be used such as Venture Extra, Allegro Plus, or triazoles (Proline, Strand, etc), plus strobilurin mixes (Amistar Opti, Credo, etc). For further information, contact your Teagasc tillage adviser.

Spring barley suggested fungicide programmes

Timing	Disease	Products (litres per ha)
T1 GS 30-31	Low disease pressure	Triazole (Proline, Rubric, Punch C etc) @ ½ rate +/- Corbel ~ ½ rate (mildew) or Stereo 1.25 L/ Tocata 1.0 L
T1 GS 25-30 Apply early if disease is visible during tillering	High disease pressure	Rhyncho: Use high rates of prothioconazole (~150 g ai/ha) Net Blotch: Use higher rates of triazoles above and include a ½ rate strobilurin Proline 0.5 L, Strand 0.8 L, Punch C 0.6 L, Stereo 1.5 L + (Modem, Amistar, Galileo) @ ½ rate (see also T2 for pre-formulated options)
T2 Flag Leaf to awns visible (GS 37-49)	Normal disease levels	Chlorothalonil 1.0 L + (Adexar, Barley Pack, Bontima, Cauldron, Siltra) or Chlorothalonil 1.0 L + Triazole (Proline, Strand, Punch C etc) @ ½ - ¾ rate + Strobilurin (Amistar, Galileo, Modem) @ ½ rate (Pre-formulated mixtures of the above and other actives are widely available, e.g. Treoris, Acanto Prima, Amistar Opti, Credo, Fandango, Lumen, Jenton, etc)
	+ Mildew	+ 0.3-0.5 L Corbel/Tern/Winger

The fruits of forestry

Work, income and long-term prosperity are the rewards of a professional approach to forestry according to this Roscommon beef producer. Noel Kennedy reports

Martin Beirne, who farms near Elphin, Co Roscommon, has three strings to his bow: a beef finishing enterprise on 125 acres, an off-farm job, and a forestry enterprise which he has built up to more than 200 acres over the last 14 years.

In the 1990s, Martin began planning for his pension and future farming options though his retirement was still a long way off. "I looked into what was involved — from planting grants and premia to management and timber sales — and I became convinced that planting trees would prove to be the right choice."

Having decided to keep his own land for cattle, Martin made his first foray into forestry in 1999, buying and planting a local 35-acre farm of marginal land. The advice from his Coillte forester was to plant a Sitka spruce and Japanese larch crop that would grow quickly and provide the best longer term returns on the heavy

mineral soil.

Over the next 10 years, the Celtic Tiger roared but Martin resisted the siren call of bricks and mortar. He retained his faith in Sitka spruce, buying and planting five more farms and building his forest ownership to over 200 acres by 2009.

"I availed of afforestation grants to 'plant and maintain the forests for the first four years' and, in all cases, the cost of the work was fully covered," says Martin.

Martin qualified for the farmer rate of annual forestry premium which is paid for 20 years. Currently, his annual premium is worth €35,000.

"The premium income is very welcome and it goes towards repaying the loans I took out to buy the land," says Martin. "It also helps with the day-to-day expenses of managing the forest, including fire, insurance which is so important."

Importance of a professional approach

With so much depending on his forestry investment, Martin decided that the only way to ensure the best possible outcome was to take an entirely professional approach to forest management. In line with Forest Service requirements, Martin has management plans for all his plantations.

In addition to regular visits to check his forests, he keeps himself up to



date with current forestry issues, including certification, through regular contact with his local Coillte and Teagasc foresters. "I think forestry has tremendous potential on many farms and I would encourage farmers to look seriously at it as an alternative enterprise."

Choosing land

With plans to buy more land for planting, Martin adopts a cautious approach. He focuses on buying land that will meet his primary objective of growing productive Yield Class 24+ * Sitka spruce. Other important criteria are:

1. Choose only fertile enclosed mineral gley sites.
2. Avoid fragmented parcels.
3. Ensure good road access — avoiding narrow bridges and culverts.
4. Prefer sites within 10km to 15km of the home farm.
5. Select sheltered sites but avoid potential frost hollows.
6. Be flexible on the size of parcels, depending on proximity to home farm.

* Yield class is how forest productivity is measured — a Yield Class 24 forest has the potential to increase its volume by 24 cubic metres per hectare each year over its lifetime.

Clustering

Five of Martin's six plantations are within a 10km radius which allows him to develop a forest 'cluster'. Clustering has proven advantages — it allows economies of scale for thinning and appeals to timber buyers attracted by larger timber sales, future



Martin and son Ronan admire a four-year-old Sitka spruce. Their adjoining six-year-old plantation is in the background.



Building a renewable energy business — Martin processes firewood in his yard.

Planting

Planting better quality land makes your money grow faster

Sitka spruce will grow on a wide range of site types. Using Teagasc's FIVE (forestry financial calculator) you can compare the returns from forestry on two different sites. The results show the clear financial benefits of planting sites which are productive for trees yet only produce marginal returns from cattle and sheep.

It's possible that two pieces of land could both be marginal for agriculture and roughly the same price.

The forestry yield potential of the two plots might vary greatly, however.

The key message is that if you are intending to buy land for forestry, have a professional assess its yield class before investing. See *Table 2*.

thinning streams and more efficient timber haulage.

Firewood business

With his own thinnings scheduled to come on stream from 2015, Martin began developing an enterprise that would provide a ready outlet for some of the thinnings. With a suitable yard, sheds and willing labour, Martin and sons Ronan and Shane (both at college) set up a small firewood processing and sales business three years ago.

Since then the business, which is run (mostly at weekends) by Ronan and Shane, is supplying a growing base of local customers. Until they have their own timber, they are buying thinnings from local Coillte forests. They believe that their firewood, which is dried to under 25% moisture content, a competitive price and a free delivery service are key to the successful expansion of the business.

There are already plans for a new storage shed and modernised bagging system and more ambitious longer term plans for a larger firewood processor, kindling machine and customised processing shed.

"We are creating a value-added market for when our own timber comes on stream," says Martin. "It is providing the lads with some work, responsibility and business experience."

As he heads towards retirement, Martin's vision for a thriving farming and forestry businesses is well on course. As he watches his trees growing taller and more bags of firewood leaving his yard, he knows he was right — his faith in forestry is already being rewarded.

Table 1: Martin Beirne – Forestry details

Planting year	Conifers(ha) *	Broadleaves(ha)**	Total area(ha)
1999	12.2	1.8	14.0
2001	8.43	0	8.43
2004	11.2	1.8	13.0
2005	17.72	0	17.72
2006	15.12	0	15.12
2009	14.0	0	14.0
Total	78.67	3.6	82.27 (203 acres)

Current annual afforestation premium €35,300

* Sitka spruce (80% and Japanese larch (20%) — annual premium @ €427 per ha

** Ash — annual premium @ €481 per ha.

Please note that the broadleaf area relates to grant-aided areas and does not include bands of broadleaves planted for landscaping, e.g. along roads, watercourses, etc.

Table 2: Comparing timber crop value based on land quality scenario — planting one hectare of Sitka spruce (including 10% hybrid larch). These returns are based on owned-land.

Site type 1	Site type 2
Fertile grass/rush wet mineral soil	Less fertile rushy peat soil
Sitka spruce Yield Class*** 24	Sitka spruce Yield Class 16
Crop rotation 38 years	Crop rotation 44 years
NPV* = €9,547	NPV = €6,857
AE** = €566 per hectare	AE = €388 per hectare

*Net present value (NPV) = Total net value of timber crop over the rotation expressed in today's money.

**Annual equivalent (AV) = Annualised value of timber crop in today's money.

***Yield class is how forest productivity is measured — a Yield Class 24 forest has the potential to increase its volume by 24 cubic metres per hectare each year over its lifetime (38 years) compared with a Yield Class 16 forest which has the potential to only increase its volume by 16 cubic metres per hectare each year over its lifetime (44 years).

Other assumptions:

Land: Owned; Age: New planting; Timber prices: 10-year average prices; Discount rate: 5%; Premium: GPC three to 20 years (farmer rate) @ €427 per hectare; Costs: maintenance, insurance, brashing, roading and reforestation

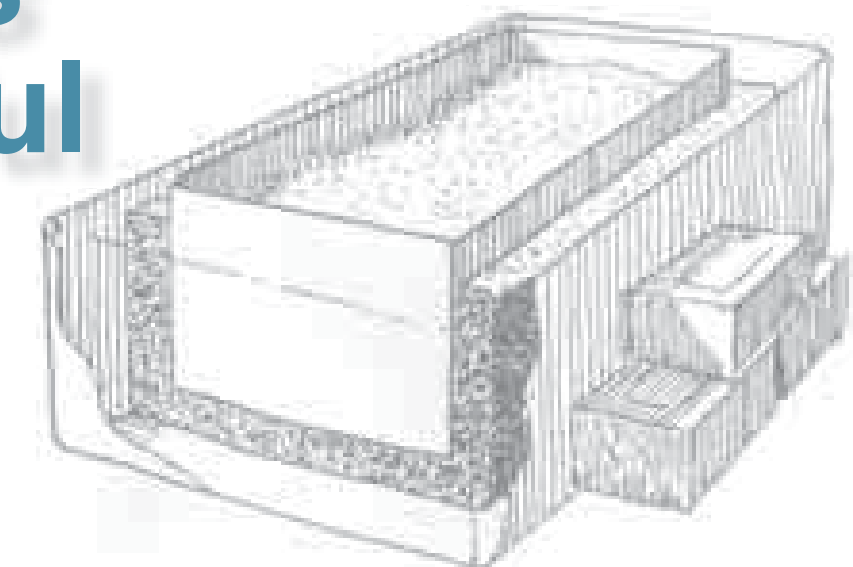
Botanic Gardens

When small is beautiful

A trough can be a simple way to create your own miniature garden, writes Paul Fitters at the Teagasc College, National Botanic Gardens

There can be many reasons for wanting to create a miniature garden. You have a small garden or patio and want to pack it with as many different plants as you can; you may want to create a focal point; you may need something sturdy to prevent people cutting corners in your garden or you are a keen alpine plant lover and need to create that special environment for that plant treasure. Whatever your reasons, a trough can be a simple solution and a long lasting feature in your garden. However, buying the 'real thing', a genuine carved old stone trough, can be very expensive, so why not consider making it yourself, for a fraction of the cost, and lots of satisfaction?

Making a trough is easy enough and the possible variations in size and style are infinite. I have been making troughs with students for a good few years and have found that it is fun to do and that the final products are as



Making a trough is easy enough and the possible variations in size and style are infinite.

varied as there are students in the class.

First of all you need to get a big cardboard box that will dictate the final outer size of your trough. Then you need to find a second cardboard box that will fit into the first, leaving about 6cm to 10cm space on all sides (see diagram). This box will dictate the final inner planting space.

Next the trough mixture, or hypertufa, has to be made; this goes between both boxes. I use a mix of one part cement, one part fine peat (or alternative) and one part sand. The peat will give the final trough a more natural look and will facilitate algae to colonise it over time, giving it that genuine look. However, it will also make the concrete mix a bit more fragile, so don't overdo the peat.

Start with filling the bottom 6cm of the big cardboard box with this mixture. It is important to provide drainage in any trough, so as not to end up with a pond after a downpour. One way of doing that is to press wooden dowels into the mix, somewhere in the middle, that are of equal height to the mixture

poured in. Then the inner box is placed on that mix and dowels and the vertical space between both boxes is packed with the remaining mixture. How high you go is your own choice.

As the hypertufa mixture is very wet, the boxes tend to get soft and start to buckle. To prevent this, fill the inner box with dry sand or bricks and support the outer box with bricks. Cover the construction with plastic and leave for a few days to harden. Then remove the plastic and cardboard boxes and carefully knock out the dowels. This is the tricky bit as the cement is not fully hardened yet and could easily crack. However, it needs to be done now as the dowels are unlikely to come out when fully set.

Also, this is the time to give your trough that weathered look by taking off the sharp edges that are created by the cardboard boxes. Use any utensil you like to scratch and carve the outside of your trough. In my view you cannot make it rough enough. When this is done you need to let the trough dry fully for at least a week.

Planting up is the easy bit, but as the planting volume is rather limited and likely to dry out quickly, choose plants that are dry tolerant, such as *Semprevivum*, *Sedum* or herbs. Small bulbs would work well too.

Finally, to help preserve moisture in the soil, give the trough a generous top dressing of gravel, which will also aid in the alpine 'look'. All you now have to do is place it somewhere you like and enjoy it. Good luck.



← Fill the inner box with dry sand or bricks and support the outer box with bricks.

CARLOW

Carlow (059) 913 4600
 Dave Bermingham
 Claire Walsh

CAVAN

Cavan (049) 4361301
 Conor McGovern
 Fergal Brady
 Adrian Grimes

CLARE

Ennis (065) 68 22300
 Ide O'Keeffe
 James McInerney

CORK

Midleton (021) 463 2366
 John Ryan
 Kevin Whittle

Cork (021) 4544299
 Jim Cleary
 Des O'Regan

Mallow (022) 22591
 John Paul Aherne
 Gerard Cott

Bandon (023) 8842588
 Jim Cleary
 John O'Donovan

Skibbereen (028) 21688
 Mary Crowley

DONEGAL

Letterkenny (074) 91 26299
 Diane McGarrigle
 Peter McGinley
 Michael McHugh

GALWAY

Athenry (091) 844110
 Tommy Kelly
 Val Daly
 Patrick Kelly

Galway (091) 778070
 Richard Geraghty
 Des Fahy

KERRY

Tralee (066) 71 22185
 Michael Kerins
 Margaret Maunsell

Killarney (064) 6636148
 Mike O'Donoghue

KILDARE

Naas (045) 876101
 Brian Scully
 Kenneth Garry

KILKENNY

Kilkenny (056) 772 1300
 Joe Nolan
 Brian Prout

LAOIS

Portlaoise (057) 8621694
 Pat Maher
 Paul Cuddy

LIMERICK

Limerick (061) 491 400
 Assumpta Leahy
 Anton Roche

Newcastle West (069) 61577
 Richard Lanigan
 Kayo Galvin

LOUTH

Drogheda (041) 9836384
 David Ryan
 Carol O'Connor
 Alan Ludlow

MAYO

Castlebar (094) 90 21955
 Tom Byrne
 Fred Flynn
 John Lyons

MEATH

Navan (046) 9031637
 Noel Hickey
 Barry Clarke
 Paraic McGuinness

MONAGHAN

Monaghan (047) 82033
 Elaine Malone
 Ciarán Harte

OFFALY

Tullamore (057) 9321707
 Bill Meaney
 Amanda Brennan

ROSCOMMON

Roscommon (090) 66 26344
 Tommy Grehan
 Anne-Marie Conry

SLIGO

Sligo (071) 91 44164
 Fintan Kennedy
 Declan Clarke

TIPPERARY

Nenagh (067) 31 989
 Maureen O'Meara
 Peter Cosgrove

Thurles (0504) 23299
 John Costigan
 Brid Harrington

Clonmel (052) 6126537
 Willie Phelan
 Jackie Dunne

WATERFORD

Waterford (051) 850377
 Kathleen Murphy
 Michael Colivet

WESTMEATH

Mullingar (044) 9348867
 Barbara Allen
 Pdraig Murtagh
 Louis Belton

WEXFORD

Wexford (053) 91 68200
 Joe Kavanagh
 Gerry Kearns
 Barry Kinsella

WICKLOW

Wicklow (0404) 68465
 Carolyn O'Hara
 Darragh Killoran



**There's a
 qualified
 farming
 expert nearby -
 just call**

**Contact your local FBD office
 and we'll call out to you.**

F|B|D

Supporting Irish Farmers

www.fbdforfarmers.ie

FBD Insurance plc is regulated by the Central Bank of Ireland.

The next generation fungicide

Bontima

Simply greener and cleaner barley

brilliant new
IZM
technology,
behind the
scenes

Designed specifically
for barley to deliver
consistently higher
yields and quality.
All major diseases
controlled with
one product.

 **Bontima**[®]

syngenta[®]

Triple rinse containers, puncture and invert to dry at time of use.

To find out more about BONTIMA contact your Syngenta Area Manager or Local Advisor.

Syngenta Ireland Ltd. Block 6, Cleaboy Business Park, Old Kilmeden Road, Waterford.
Tel: 051 377203 Fax: 051 354748 Email: cropsales.ie@syngenta.com Website: www.syngenta.ie

BONTIMA[®] is a Registered Trademark of a Syngenta Group Company. BONTIMA (PCS 03932) contains isopyrazam and cyprodinil.
Use plant protection products safely. Always read the label and product information before use. **PAY ATTENTION TO THE RISK INDICATIONS AND FOLLOW THE SAFETY PRECAUTIONS ON THE LABEL.** ©Syngenta AG April 2012. IRL. GQ 02745

TM