

# POLLINIA



*Hymenopus coronatus*

NEWSLETTER OF THE IRISH ORCHID SOCIETY

*Cumann Magairlíní na hÉireann*

Volume 11, Issue 4

An Samhradh

July 2013

## THE IRISH ORCHID SOCIETY COMMITTEE

Chairman: (Vacant)  
Treasurer: Mary Bradshaw  
Secretary: Marie Hourigan  
Editor: Laurence T. May  
Committee:

Marina Andreeva  
Una Breathnach  
Lisa Coffey

### POLLINIA

(pol-LIN-ee-uh)

The compact packets of pollen found in orchid flowers. Plural of *Pollinium*.

Waxy pollen clumps or grains usually found in the anthers of most orchids; often yellow, distinct, and found under the pollen cap of the column.

Pollinia contain the male reproductive cells.

Latin *pollin-*, stem of pollen "fine flour, dust."



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## IOS MEMBERSHIP DETAILS

### ANNUAL SUBSCRIPTIONS

(renewable in June of each year)

- Adult Single €20.00
- Family €30.00
- OAP/Student\* €15.00

(\*Confirmation of student status required)

Please make cheques or PO payable to:

#### The Irish Orchid Society

Applications and other society communications should be made to the Secretary:

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**Irish Orchid Society**  
**c/o National Botanic Gardens**  
**Glasnevin, Dublin 9, Ireland**  
[info@irishorchidsociety.org](mailto:info@irishorchidsociety.org)

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Copies of this and previous issues are available at: <http://www.pollinia.org>

Cumann Magairlíne  
na hÉireann



## THE FUNGUS NETWORK

*'PLAYS ROLE IN  
PLANT  
COMMUNICATION'*

**M**ycorrhizae are mutualistic - they both need and are needed by the plants whose roots they inhabit.

Plants can communicate the onset of an attack from aphids by making use of an underground network of fungi, researchers have found.

Instances of plant communication through the air have been documented, in which chemicals emitted by a damaged plant can be picked up by a neighbour.

But below ground, most land plants are connected by fungi called mycorrhizae.

The new study, published in **Ecology Letters**, is the first to demonstrate these fungi also aid in communication.

Researchers from the University of Aberdeen, the James Hutton Institute and Rothamsted Research, all in the UK, devised a clever experiment to isolate the effects of these thread-like networks of mycorrhizae.

The team concerned themselves with aphids, tiny insects that feed on and damage plants.

Many plants have a chemical armory that they deploy when aphids attack, with chemicals that both repel the aphids and attract parasitic wasps that are aphids' natural predators.

The team grew sets of five broad bean plants, allowing three in each group to develop mycorrhizal networks, and preventing the networks' growth in the other two.

To prevent any through-the-air chemical communication, the plants were covered with bags.

As the researchers allowed single plants in the sets to be infested with aphids, they found that if the infested plant was connected to another by the mycorrhizae, the uninfested plant began to mount its chemical defence.

Some strains of wheat have been genetically modified specifically to resist the aphid threat. Those unconnected by the networks appeared not to receive the signal of attack, and showed no chemical response.



*Mycorrhizae are mutualistic - they both need and are needed by the plants whose roots they inhabit*

"Mycorrhizal fungi need to get [products of photosynthesis] from the plant, and they have to do something for the plant," explained John Pickett of Rothamsted Research.

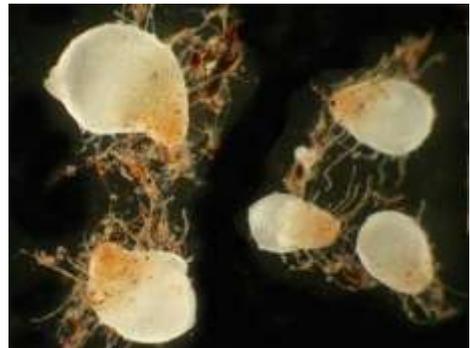
"In the past, we thought of them making nutrients available from the [roots and soil], but now we see another evolutionary role for them in which they pay the plant back by transmitting the signal efficiently," he told BBC News. Prof Pickett expressed his "abject surprise that it was just so powerful - just such a fantastic signalling system".

The finding could be put to use in many crops that suffer aphid damage, by arranging for a particular, "sacrificial" plant to be more susceptible to aphid infestation, so that when aphids threaten, the network can provide advance notice for the rest of the crop.

"Now we've got a chance in a really robust manner of switching on the defence when it is needed - not straining the plant to do it all the time - and to reduce the development of resistance (of the aphids to the plants' defences)," Prof Pickett said.

BBC News: Science & Environment

[ Editor: There are three general types of mycorrhizae: (1) ectomycorrhizae, (2) endomycorrhizae, (3) orchid mycorrhizae. The distinction is based on the morphology of the structure formed by the fungi and the plants, if there is penetration of the root cells or not.]



*Seedlings of Rhizanthella gardneri germinated by a mycorrhizal fungus linked to ECM roots of a shrub (Melaleuca sp.). These subterranean seedlings are 2-10 mm long with a zone of brown hyphal coils clearly visible at their base.*



*Liparis lacerate*

This magnificent orchid presently has about 8,000 flowers growing from 40 spikes.

Although a common species, growing 40 spikes with 8,000 flowers is no mean feat, as its owner Hon Quik Pin, from Johor, will tell you.

His prized plant is currently hogging the limelight at the Orchid Competition & Promotion Carnival at Tesco Extra Bercham, Ipoh, Malaysia

The species was discovered in 1887. It is endemic in Mount Kinabalu.

RECENTLY IN FLOWER AT THE NATIONAL BOTANIC GARDENS

*Maxillaria sophronitis* renamed *Ornithidium sophronitis* flowers nearly all summer long in the cool house.

It has single long flowered inflorescence bearing tiny flowers less than 1" [1.5 cm] in size. This orchid can produce up to 50-60 blooms at any one time.

*Maxillaria sophronitis* is found on the edge of cloud forests in Venezuela and NE Colombia at altitudes of 750 to 1700 metres in cloud forests. This cool growing epiphytic, mat-forming orchid has ovoid, compressed, dull brown unifoliate pseudobulbs which are subtended by one or two leaf-bearing sheaths.

Potted in a mixture of bark and sphagnum moss this epiphyte can also be mounted on tree-fern or cork. It requires constant moisture and bright light. This mat-forming orchid requires regular watering it is important to kept the mixture moist but not wet during the growing months with less water during the winter months. Maximum daytime temperature of 21°C (70°F) and minimum night time temperature of 11°C (52°F) is ideal.

Commonly called The Sophronitis-Like Maxillaria and costs around €25 online.

MARIE HOURIGAN



## BLC MARGARET THATCHER

One warm, sunny August day in 2004, Margaret Thatcher toured the campus of the University of Richmond, greeting students and faculty before attending a dinner in her honor. She also made orchid history by accepting a *Cattleya* hybrid bearing her name.

The former prime minister of Great Britain, then 78, did much more than be photographed with her namesake orchid. She wore the delicate flowers in a corsage the entire day.

She was well-protected and traveled with three assistants as well as members of Scotland Yard. After being shown the three lavender blossoms tied with ribbon and resting on a silver platter, she asked to wear the corsage on her lapel. There was much scrambling as her staff tried to locate a suitable corsage pin to attach the flowers. Finally one was found, and the floral décor secured.

Thatcher was led to the hallway where she approached a mirror ever so slowly. She studied the flowers without saying a word. Finally, she proclaimed with much determination and in her familiar British dialect, “Simply lovely,” and all personnel let out a sigh of relief. She then posed for photographs and went about her day with that orchid corsage pinned firmly to her lapel.

And what an orchid it was. The breeding lines of *Blc Margaret Thatcher* date back more than a century and include the best of the classic English hybrids, including McBean’s *Lc Princess Margaret* (1930). The medium-sized flowers are perfectly round and offer an intoxicating fragrance. ♦

ARTHUR CHADWICK



# **Minutes of the A.G.M. of the Irish Orchid Society**

## **Monday 10<sup>th</sup> June 2013 7pm**

### **Apologies**

Total attendance 15 members. Meeting began at 7:15pm

**Minutes of the AGM 2012** were read out by Marie Hourigan,

### **Matters Arising from the 2012 minutes**

Shane Kerr enquired about the art exhibition that Susan Sex had mentioned during last years meeting and whether anything had been done about it. Marie Hourigan responded by saying that at the time of the orchid fair in April the gallery space in the Visitor Centre was not available for an exhibition.

Minutes were proposed by Shane Kerr and seconded by Scott MacNaughton

### **Chairman's Address (Summary)**

Shane Kerr heartily welcomed everyone to the twelfth Annual General Meeting of the Irish Orchid Society.

Shane began by reminding members that they had enjoyed a year's free membership in celebration of the first decade since Society's foundation but now subscriptions were due for next year.

Shane covered the main events of the past year and recalled how it started with another warm and dry field trip to North Bull Island although it was not a vintage year in terms of orchid spectacle it was as always good fun and he thanked Brendan Sayers for once again for leading it.

In September there was a photographic presentation of the students who participated in the school's orchid art competition held in spring 2012 and Shane stated that this highly successful event should fill members with pride. Later that evening we were introduced to the world of member Marina Andreeva's home orchid collection through her stunning photographs.

In October we had members' night which featured more of Marina's photographs, this time taken in the Burren. Later the inter-dependence between the *Coryanthes* orchid, the Brazil nut tree and the Agouti mammal was described.



In November we looked at orchids through the world of art down the ages from the simple Chinese brushwork to the opulent masterpieces of Victoriana.

In December the traditional soir e took place and Shane said he understood that there was more wine available than usual probably due to his absence!

In February, there was a re-potting demonstration which was interactive and instructive for all concerned.

In March, a variety of bargain orchids from Ray Creek Orchid nursery was kindly selected and ordered by Scott MacNaughton and these were then raffled at the March meeting amongst attending members. The cultivation of each plant on offer was also discussed.

In April, the Society again participated in National Botanic Gardens Orchid Fair and a good range of plants were exhibited by members and reasonable funds from the raffle were generated. Shane warmly thanked the members who assisted over the weekend at this highly important promotional event to the Society.

2013 was also the year the Society decided to join the European Orchid Council after several invitations from the organisation. Members were invited to visit the EOC website to find out more about the organisation which Shane hoped might open doors for the Society in future years.

Finally, Shane announced his official retirement from the chairmanship after four years. He said he was very grateful to the members who have been so kind and patient in supporting him. He stated that he had learned more from members than they ever did from him and that as the adage goes: teaching is the best way of learning!

**Shane Kerr**

The Chairman's report was proposed by Olwyn Lanigan and seconded by  una Breathnach.

### **Treasurer's Report**

As Mary Bradshaw had only taken over from Tom in the last few months; she did not have all the account details available.

Mary gave a quick synopsis of the money held in each account by the Society.

Current Account: € 823.96  
 Savings Account: € 910.29  
 Deposit Account: €5,066.93

The Society is in a good financial situation and the last bill to be paid was for April 2013 **Pollinia**. Mary went on to say there are no outstanding bills at present and wanted to take the opportunity to thank Tom Petherbridge for his work as treasurer and a huge thanks for leaving the accounts in such good condition.

Mary also thanked Úna Breathnach for organising the raffles in the last year without which our funds may not be so healthy.

The Treasurer's report was proposed by Olwyn Lanigan and seconded by Marie Hourigan.

### **Election of Committee Members (if applicable)**

Present Committee:

Chairman	Shane Kerr (outgoing)
Treasurer	Tom Petherbridge/Mary Bradshaw ( mid year change)
Secretary	Marie Hourigan
Editor	Laurence T. May
Committee members	Scott MacNaughton (outgoing) Úna Breathnach

Marina Andreeva was proposed by Marie Hourigan and seconded by Shane Kerr as a new committee member.

Lisa Coffey was proposed by Mary Bradshaw and seconded by Úna Breathnach as a new committee member.

As there was no interest in the chairman's position at this time it was decided that the committee/Society would continue on until a chairman was found or a floating chairman among the committee members was decided upon.

The committee going forward consists of the following:



Chairman	Vacant
Treasurer	Mary Bradshaw
Secretary	Marie Hourigan
Editor	Laurence T. May
Committee:	Úna Breathnach
	Marina Andreeva
	Lisa Coffey

Marie Hourigan took the opportunity on behalf of herself and the Society to sincerely thank Shane Kerr for his dedication as chairman of the Society and the time he took in preparing talks and lectures, answering emails and queries etc. during the last four years.

Marie H. also thanked Scott MacNaughton for his four years of service on the committee, his comments and opinions were much appreciated on the committee.

Marie H. did remind everyone present, that the Society could not continue indefinitely without a Chairman and invited all members of the Society who may have an interest in the position to give it some thought. She reminded everyone that it was only a two year post not four and that Shane Kerr had opted to serve for a second term.

### **Any Other Business**

The Society would like to wish Tom Petherbridge good wishes and thanks for his years as treasurer.

Hylde Beckett would like to thank the National Botanic Gardens for allowing the Society the use of their facilities. She also wondered if it would be possible to hold one or two meetings during the year on a Saturday/Sunday to allow members outside Dublin to attend meetings, maybe holding a meeting conjunction with another event like a lecture etc.

Hylde also suggested holding a quiz during the year instead of a lecture.

Mary Bradshaw said the accounts were very healthy and wondered if anyone had ideas on spending some money the further the aims of the Society. Olwyn Lanigan asked if it would be possible to hold a school art event similar to last year. Scott MacNaughton wondered if some money could be used to help with funding a trip to the UK. Olwyn said as a charity the IOS can not subsidise ourselves with funds.

Olwyn Lanigan told the Society that the World Floral Show was coming to Ireland

for the first time. It will be held in the RDS in June 2014 and that members should have a look at the website for more information. ([www.wafaireland.com](http://www.wafaireland.com)) It maybe something that the Society could attend as a group. Owlyn also mentioned the Irish Peatland Conservation Centre in Lullymore, Co. Kildare ([www.ipcc.ie](http://www.ipcc.ie)) as a potential place for the Society to visit.

Mary Bradshaw wanted to remind everyone that even though the committee organises lectures etc. during the year, it is important to remember that every night is a members' night and members should bring their plants any night they attend if they want advice etc. Sometimes the most interesting conversations are the ones that start when someone brings a sick plant along for advice.

Mary also mentioned the *Orchis mascula* that she brought along for show and reminded everyone that we are coming into the season for native Irish orchids.

Shane Kerr asked if anyone's Phalaenopsis are still alive from the de-flasking workshop from last year. Some were still alive but others had failed miserably with a less than 50% success rate of the members present.

Lisa Coffey also mentioned that she brought along the statistics from the website. In the last year 7,326 people viewed the site, 5,818 of these were new visitors. The top 5 countries were, Ireland, USA, UK, Canada and Germany and the page on native Irish orchids is still the most visited. That page was viewed 3,124 times.

[Editor: The **Pollinia** website had 1,447 new visitors in the period and recent members blog, *Magairlíni*, had 278 visitors. ]

Meeting concluded at 8:20pm. Followed by a raffle. ♦

### **MEMBERS SUBSCRIPTION REMINDER**

Members are reminded that the Membership year begins on June 1st each year. Annual Subscriptions are now due for 2013-2014.

Subscription per the schedule on page two are to be posted to:

**Marie Hourigan, Secretary**  
**Irish Orchid Society**  
**c/o National Botanic Gardens**  
**Glasnevin, Dublin 9, Ireland**



**DUBLIN ORCHID FAIR - MARCH 2013**



*Cymbidium 'Tiger Tail'*

**AWARDS**

**Best In Show** to Brendan Sayers for his Cymbidium 'Tiger Tail'

**Best Cymbidium** to Brendan Sayers for his Cymbidium 'Tiger Tail'

**Best Hybrid Awards** to Brendan Sayers for his Cymbidium 'Tiger Tail'

**Best Paphiopedilum** to Marina Andreeva for *P. concolor*

**Best Cattleya Hybrid** to Marina Andreeva for Bc. Golf Green

**Best Phragmipedium** to David Flett for *P. Memoria Dick Clements'*

**Best Species** to Mark Garvey for *Cattleya mendelii*

**Best Oncidiinae** to Hylda Beckett.

**The Myrad Best Award** goes to Brendan Sayers for his Cymbidium 'Tiger Tail'

**Raffle Prize Winners:**

1st Prize: Liz Meade

2nd Prize: Meg Offiah

3rd Prize: M. O'Halloran

4th Prize: Anne Carolan

5th Prize: Maeve Conroy

6th Prize: Lisa Coffey

## THE STRANGE CASE OF THE BANDIT BUMBLEBEES

TO MOST people, bumblebees are charming, slightly absurd creatures that blunder through garden and meadow with neither the steely determination of the honeybee nor the malevolent intention of the wasp. If you are a plant, though, things look rather different—for from the point of view of some flowering plants many bumblebees are nothing more than thieves. They rob them of their nectar and give nothing in return.

Nectar robbery, in which a bumblebee carves a hole in the side of a flower as a bank robber might cut his way into a vault, was discovered by Charles Darwin. This technique lets bees get at the nectar of flowers whose shapes have evolved to encourage their pollination by insects with long tongues, which can reach down narrow tubes.

Some bumblebees do have such tongues. But some do not. Short-tongued bees are, however, unwilling to deny themselves the bounty of nectar inside these flowers. Hence the hole-cutting. By breaking in in this way, though, a bumblebee nullifies the 100m-year-old pact between flowering plants and insects: that the plant feeds the insect in exchange for the insect pollinating the plant.

The question about nectar robbery that has intrigued biologists from Darwin onwards is whether the behaviour is innate or learnt. Darwin, though he originated the idea that many behaviour patterns are products of evolution by natural selection, suspected that it is learnt. Insects, in other words, can copy what other insects get up to. Only now, though, has somebody proved that this is true.

The observations were made by David Goulson (then at the University of Stirling, now at the University of Sussex), and his colleagues. To test his ideas he had to go from Britain to Switzerland, for only there could he find a flower of the correct shape to conduct the study.

His crucial observation was that when the flowers of an alpine plant called the yellow rattle are robbed, the entry holes—because of the structure of the flower—tend to be unambiguously on either the right-hand side or the left-hand side. Moreover, preliminary observation suggested that the holes in flowers in a single meadow are often all made on the same side. This led him to speculate that bumblebees in a particular area do indeed learn the art of nectar robbery from one another, and then copy the technique with such fidelity that they always attack a flower from the same side.

### **Crime and nourishment**

His team monitored 13 alpine meadows during the summers of 2009 and 2011. They



painstakingly recorded the sites of robbery holes in yellow-rattle flowers, and studied the behaviour of 168 bumblebees. They tried to follow each bee until it had visited 20 flowers, though they lost sight of some insects before they had reached this score. If they could, they then captured the insect so as not to follow it again on another occasion.

Dr Goulson found, as he reports in *Behavioral Ecology and Sociobiology*, that two short-tongued bumblebee species which live in the area, *Bombus lucorum* and *Bombus wurflenii*, demonstrated handedness when they robbed flowers. Moreover, if one species was behaving in (say) a left-handed manner in a particular meadow, the other was likely to do the same. This suggests that one species can learn from another—a trick previously thought to be confined to vertebrates.

Handedness in any given meadow, Dr Goulson found, increased as the season progressed. But each summer appeared to start as a blank slate. The handedness that developed in a meadow in 2009 did not predict its handedness in 2011.

The most reasonable explanation, Dr Goulson argues, is that each year a few bumblebees which have learnt the trick of nectar robbery in the previous season come out of hibernation and start robbing flowers again. By chance, they make more holes on one side of the flowers than the other, and as the habit is picked up by other, newly hatched bees, a preference for left or right spreads by a process of positive feedback. The bees have, in other words, created a simple culture. It is a criminal culture, admittedly. But no one ever said that nature was pretty ♦



**The Economist**  
<http://econ.st/10ghZ1q>

*There are 101 known bee species in Ireland. Almost one fifth of the fauna are social bees, with 19 species of bumblebee and one species of honeybee. The remaining 81 species are solitary bees, which fall within 10 different genera.*

**DONEGAL WILDLIFE**

*A regularly updated pictorial narrative by Stuart Dunlop of the wildlife around Raphoe, Co. Donegal*

One of the most dramatic changes over the past 3 years has been the explosion of Common Spotted Orchids - *Dactylorhiza fuchsii*. Here are a few of the variations:



I always think that Ragged Robin - *Lychnis flos-cuculi* - is far too exotic to be a common plant. Later specimens will have even more elongated and split petals.



*Lychnis flos-cuculi*



*Myosotis scorpioides*

Water Forgetmenot - *Myosotis scorpioides* - has now swamped large areas of still water. Flower about 8 mm across.



*Rhinanthus minor*



*Pedicularis palustris*

Finally, two closely related plants. Yellow Rattle - *Rhinanthus minor* - and Red Rattle - *Pedicularis palustris*

Red Rattle is another name for Marsh Lousewort, but I see only little similarity between this and Common Lousewort. The leaves are completely different in shape, size and colour. Follow Stuart's regular postings about local Donegal wildlife at: <http://www.donegal-wildlife.blogspot.com>

## MARSH HELLEBORINE

<b>Common Name:</b>	<b>Marsh Helleborine</b>
<b>Scientific Name:</b>	<i>Epipactis palustris</i>
<b>Irish Name:</b>	<i>Cuaichín corraigh</i>

From June to August these pretty little orchids grow in fens and calcareous marshes, on lakeshores, damp pastures and wet dune slacks. Perennial plants, their beautiful flowers are held in loose spikes of twelve or more, each amazing little flower being comprised of three purple-red sepals, narrow red-marked white upper petals and a frilled lip below. This lower labellum is also white, is notched and has red veins with a central platform which has a yellow crinkled splotch above the white frills. This is one case where a picture really does speak a thousand words. Reaching up to 50 cm in height, Marsh Helleborines are unmistakable with their keeled and folded leaves at the base of the plant and their smaller, narrower stem leaves. These are native wildflowers belonging to the Orchidaceae family.

I found many of these lovely wildflowers on the North Bull Island in County Dublin in July 2009 at which point I photographed them.



Helleborine leaves

These plants are difficult to spot at first, but once you see one they suddenly seem to be everywhere, growing in great profusion. They are pollinated by small wasps, hoverflies and ants and they also multiply by new shoots on their rhizomes.

This plant is not too commonly found and in

Northern Ireland it is protected by the Wildlife (NI) Order. ♦

Zoë Devlin is a regular columnist for **Pollinia** on wild Irish orchids.

Zoë's website is "Wildflowers of Ireland" - <http://www.wildflowersofireland.net/>

Her book 'Wildflowers of Ireland - A Personal Record' is published by the Collins Press, Cork.









## NATIVE AND EXOTIC EARTHWORMS AFFECT ORCHID SEED LOSS

Non-native earthworms have invaded ecosystems around the world but only recently received attention after invading previously earthworm-free habitats in northern North America. Earthworms can affect plants by ingesting seeds and burying them in the soil. The effects, which can be either positive or negative, are expected to become more negative with decreasing seed size.

Because orchids have some of the smallest seeds of any plants, **McCormick et al.** hypothesized that earthworm consumption would decrease seed viability in these plants and lead to burial of ingested seeds. They used a combination of mesocosms and field measurements to determine whether native and non-native earthworms would affect the seed germination of the North American native orchid *Goodyera pubescens* by decreasing seed viability through digestion or burial. To determine soil depths at which seed burial would decrease chances of germination, they used field measurements of the abundance of mycorrhizal fungi needed for *G. pubescens* germination with soil depth.

The researchers found that the combined effects of earthworm ingestion and burial are expected to result in a substantial loss of orchid seeds. Their models estimated that 49% of orchid seeds in mature forests and 68% of those in successional forests would be lost to earthworm ingestion over an average year. The combined effects of earthworm ingestion and burial have the potential to result in a substantial loss of orchid seeds, particularly in successional forests. This effect may slow the ability of orchids to recolonize forests as they proceed through succession. Further testing will determine whether this strong effect of earthworms on *G. pubescens* viability and germination also applies to other orchid species. ♦

<http://bit.ly/132pqyd>



*Goodyera pubescens*, the Rattlesnake Plantain, is one of the most common orchids native to eastern North America. It is an evergreen terrestrial species with variegated leaves.



CHELSEA FLOWER  
SHOW: MARC QUINN  
UNVEILS MIGHTY  
BRONZE ORCHID

The Chelsea Flower Show, one of the most traditional events of the English summer season, today revealed its edgy side.

Marc Quinn, best known for using his own blood to create a frozen sculpture of his head,

unveiled a huge bronze orchid designed to help inspire the next generation of horticulturalists.

The 49-year-old artist was commissioned by the Royal Horticultural Society in their first collaboration and the eye-catching work forms a dramatic centrepiece to the centenary show which opens to the public tomorrow.

Quinn said he had worked for six months on the six-foot high recreation of the moth orchid, which in real life grows to just two or three inches.

His previous best known horticultural work, *Garden in 2000*, featured hundreds of plants in cryogenic suspension. "I work with flowers the whole time but usually the ones I work with aren't alive," said Quinn.

"Hopefully, the flowers and the sculpture blend. There is a sense of real nature and artificial nature, although having seen the transformation of this place from a muddy field it is not so clear what is real nature."

London-born Quinn is famous for his sculptures, including *Sphinx*, of Kate Moss depicted in a yoga position, and *Alison Lapper Pregnant*, of the disabled British artist which was put on Trafalgar Square's fourth plinth.

The bronze orchid was cast at the Pangolin Editions foundry in Gloucestershire and was painted with 18 coloured layers, each being stripped back so that every colour is visible.

The work will be sold through a silent auction organised by Sotheby's that will run throughout the five-day show. Funds will go to the RHS's £1million centenary appeal aimed at creating an apprenticeship scheme, a learning centre and a schools programme. ♦

## MEMBER FOCUS QUESTIONNAIRE

The Member Focus Questionnaire included with the mailing of the January 2013 issue of *Pollinia* invited Irish Orchid Society Members to share their orchid growing experiences and orchid interests with other Members.

Carol, from Cork continues the series, which will be a regular feature in future issues.

Members who have not completed the Questionnaire may continue to send them to:

Marie Hourigan, Secretary, Irish Orchid Society, National Botanic Gardens  
Glasnevin, Dublin 9, Ireland

*Carol, Your Interest in orchids began why and when?*

~ Very long ago, fuelled, when orchids became more readily available, and my college training behind me I enjoyed the appearance of the flowers and the different growing requirements

*What was your first plant?*

~ Vuylstekeara Cambria 'Lensings Favorit'

*How many plants are in your collection?*

~ 11

*Where did you purchase them?*

~ Atlantic Homecare, Dunnes, McBeans Orchids, Portugal; Presents from people

*Where do you grow them?*

~ Greenhouse/House/Conservatory/Apartment

*What is your favourite orchid species/hybrid/genus?*

~ Zygopetalum

*How often do you repot plants?*

~ Usually every 2-3 years

*Which type of potting mix do you use?*

~ Arthur Bowers Orchid compost

*Which group are you most successful with?*

~ Probably Phalaenopsis, but the Zygopetalum and Paphiopedilum do quite well.



*Which group do you continually fail with?*

~ Miltoniopsis

*Which are the oldest specimens and how old are they?*

~ The Cambria, 5-6 years

*Do you use insecticides or fungicides? if so which ones*

~ Only once and can't remember what it was

*Which fertilisers do you use and do you use tap water or rainwater?*

~ Lorbax specialist feeds. I use a mix of tap water, rain water and boiled water. I take

*Which orchid would be your dream plant/group to grow?*

~ *Zygopetalum blackii*, Can't find it anywhere; I think it's been further hybridised



*Zygopetalum blackii*  
Photo: © Kenth Esbensen

**NEW EDITION: IRELAND'S WILD ORCHIDS – A FIELD GUIDE**

Ever since the first publication of **Ireland's Wild Orchids** by Brendan Sayers and Susan Sex in 2004, the pressure has been on them both to produce a field guide to enable the gardener, wild-flower enthusiast, amateur botanist, tourist, to identify the thirty species of native Irish orchids in the wild. The original publication is now a collectors' item and selling at very high prices.

Brendan and Susan have now presented us with this field guide which is a truly magnificent production. Growing seasons, the text and descriptions are entirely up to date. Before moving to the individual plant information, there are short sections introducing well-known sites, conservation, hybridisation, morphology (plant parts) and spur types. This last section in particular is so well drawn and painted that mistakes in identification are almost impossible even for the most amateur plant lover.

There follows the actual field guide to each species and some hybrids. Here we have the actual plant description accompanied by photographs and drawings. Height of plant, Habitat, Flowering Period, Status, Distribution and Variation are all dealt with in a very compact way, each page of text accompanied by a painting. At the end of each genus section is a useful page for the reader's own notes and experiences. An index and bibliography complete the text. ♦

MARY BRADSHAW

The new edition:

**Ireland's Wild Orchids - A Field Guide**

By Brendan Sayers & Susan Sex

Illustrations, photos, full colour,

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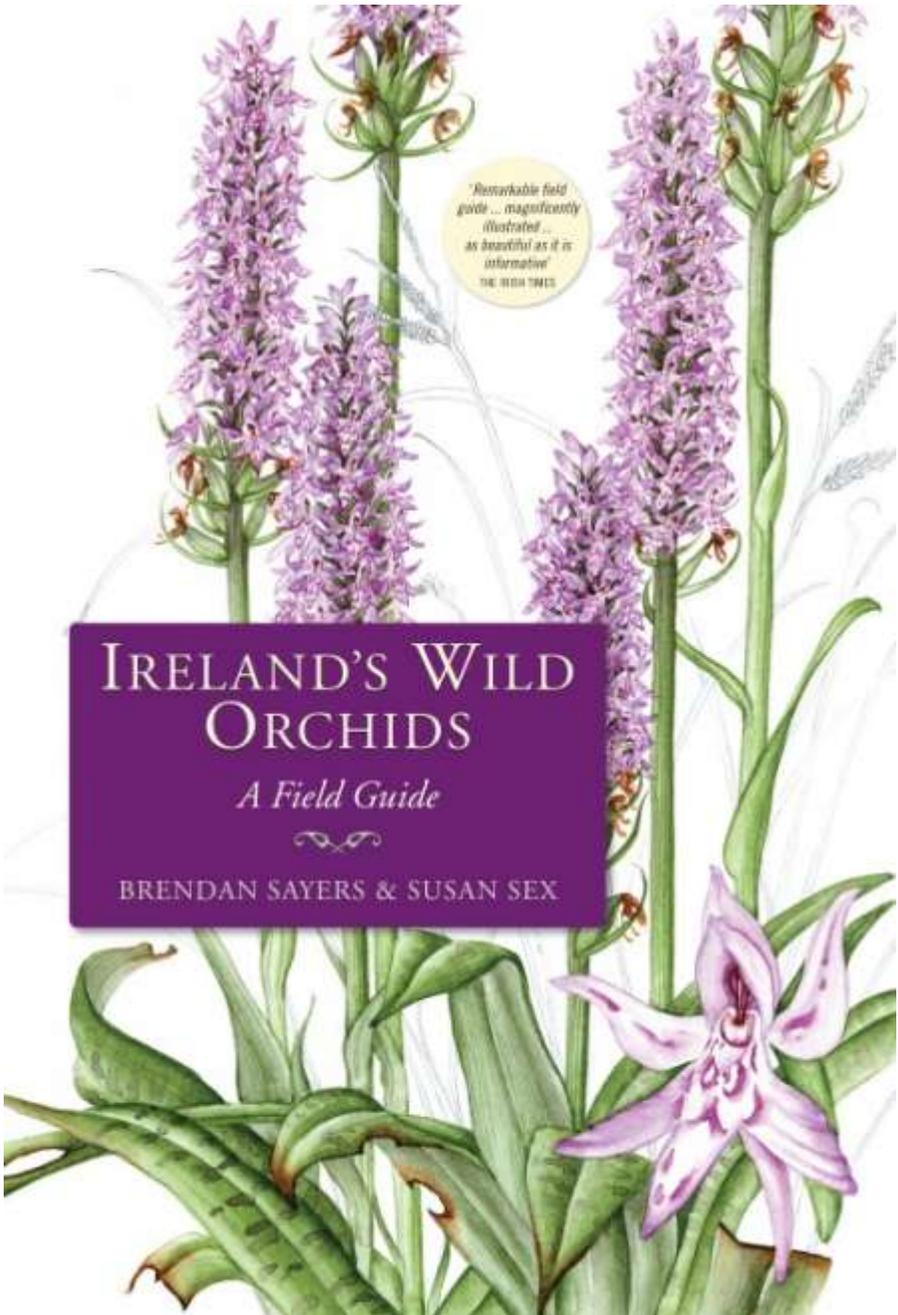
The Collins Press

Doughcloyne, Wilton,

Co. Cork, Ireland

[ **Editor:** This new edition is essentially the same practical guide. Some minor changes to layout with the main differences being the paper, the hard cover and the price. It is good that the book is finally in book shops and widely available without having to search for it. ]





## LE NOIR PRÉ ORCHID FIELD

Often known simply as ‘the Orchid Field’, this unique site actually consists of two distinct but adjoining wet meadows, Le Noir Pré, and the smaller Le Clos du Seigneur.

The site is one of the last remaining strongholds of the Jersey or Loose-flowered Orchid (*Orchis laxiflora*).

Often known simply as ‘the Orchid Field’, this unique site actually consists of two distinct but adjoining wet meadows, Le Noir Pré (10 vergées 36 perches), and the smaller Le Clos du Seigneur (2 vergées 32 perches). The site is one of the last remaining strongholds of the Jersey or Loose-flowered Orchid (*Orchis laxiflora*), which also occurs in Guernsey, but is absent from the rest of the British Isles. The meadows also contain a wide variety of other plant species, many of which have become increasingly uncommon in Jersey.

There are 32,000 orchids growing in Le Noir Pré. These include four species, those on this page plus the Pyramidal Orchid that flowers in June. Orchids have a symbiotic relationship with microscopic soil fungi, the fungi provide the orchids with nutrients and in return they gain sugars. Different orchid species use different fungal species which are sensitive to soil disturbance. Through careful management, Le Noir Pré has become an important reserve for orchids. The orchid flowering season is May to June.

### History

The site was purchased by the National Trust for Jersey from Mrs E. L. Le Maistre in 1972. At this time, many similar meadows were being drained and ploughed up for potato growing, and it was largely at the suggestion of the distinguished local botanist Frances Le Sueur that the Trust purchased the site.

The earlier history of the meadows needs to be more fully researched, but it is likely that they have always been managed for hay cutting, followed by grazing, perhaps for centuries. The name ‘Le Noir Pré’ means ‘the black meadow’ in English, perhaps a reference to the dark, peaty soil hereabouts; ‘Le Clos du Seigneur’ means ‘the close (a small enclosed field) belonging to the Seigneur’. Part of the main field was used as a rubbish tip for many years after the German Occupation (1940-45).

### Flora and Fauna

In addition to the Jersey Orchid (*Orchis laxiflora*), three other species, the Southern Marsh (*Dactylorhiza praetermissa*), Common Spotted and Heath Spotted Orchids (*Dactylorhiza maculata*), occur at the site. During May and June, the two meadows



are a riot of colour, with the stunning deep purple of the Jersey Orchids contrasting with the various shades of pink, through to white, of the remaining species. Other notable wildflowers include the Ragged Robin, Yellow Bartsia, Parsley Water-dropwort, Common Knapweed, Square-stalked St. John's wort and Tufted Vetch.

A wide range of insects can also be seen in the meadows, especially butterflies of various species, including the Orange Tip, whose caterpillars feed on Cuckooflower, and dragonflies, including the spectacular Emperor Dragonfly. Grasshoppers and crickets are also abundant, and several bumblebee species forage on the nectar-rich flowers. Small mammals such as voles, mice and shrews attract predatory birds, including the Kestrel and the Barn Owl, and the rare Marsh Harrier can sometimes be observed hunting over the site.

### **Site Management**

As a wet meadow, Le Noir Pré requires consistent management year in and year out to maintain its rich plant species diversity. Each Autumn a small herd of Jersey cows graze on the field, reducing plant height and allowing more plants to re-grow in the spring. After the plants have flowered and when the seed has dispersed, the field is cut for hay, in August.

This management system prevents dominant species, such as grasses, from taking over and improves light conditions for all plants. Cutting after seed dispersal helps increase the number of flowers on an annual basis.

Orchid counts are conducted every two years and since 1995 numbers have increased from 1,500 to 32,000 individuals and now occupy a wider area. As well as the orchids, there are 80 other flowering plants in the meadow and it also supports a wide diversity of insects, reptiles, mammals and birds.

### **Visitor Access and Facilities**

Le Noir Pré is at its best in May-June, the orchid flowering season. Guided tours are available on a special open day at this time, after which the site remains open to the public for several further weeks. Visitors must keep to the mown paths around the site and dogs are to be kept on leads.

The entrance to **Le Noir Pré** is located on Le Chemin de L'Ouziere, a minor road off Le Grand Route de Mielle (Five Mile Road). Limited roadside parking is available, and Bus 12A from St. Helier also stops nearby. See Google Maps.

**Le Noir Pré** is owned and managed by the National Trust for Jersey. Visit their website to find out more about the sites they protect and restore.

<http://www.nationaltrust.je/>

Front Cover - *Hymenopus coronatus*

As we all know, the photo is not of an orchid, nor of any plant. It is an orchid mantis.

The orchid mantis, *Hymenopus coronatus*, of southeast Asia mimics a pink orchid flower. It remains motionless on the flower spike until prey arrive; the same camouflage also protects it from predators. In his 1940 book **Adaptive Coloration in Animals**, Hugh Cott quotes an account by Nelson Annandale, saying that the mantis hunts on the flowers of the Straits Rhododendron, *Melastoma polyanthum*. The nymph has what Cott calls "Special Alluring Coloration" (aggressive mimicry), where the animal itself is the "decoy".

The insect is pink and white, with flattened limbs with "that semi-opalescent, semi-crystalline appearance that is caused in flower-petals by a purely structural arrangement of liquid globules or empty cells". The mantis climbs up and down the twigs of the plant until it finds one that has flowers. It holds on to these with the claws of its two rearmost pairs of legs. It then sways from side to side, and soon various small flies land on and around it, attracted by the small black spot on the end of its abdomen which resembles a fly. When a larger dipteran fly, as big as a house fly, landed nearby, the mantis at once seized and ate it

There is a video of the female orchid mantis available on the web. **Adventures of an adolescent Orchid Mantis** (*Hymenopus coronatus*) may be found at:

[http://www.youtube.com/watch?v=3\\_jwfKyxBrc](http://www.youtube.com/watch?v=3_jwfKyxBrc)

### Susan Sex Summer Courses



Renowned botanical artist Susan Sex will lead two courses in the Burren this summer, one from 3–5 July and the other from 12–16 August; the August course is now fully booked but it looks like there are still places available for the July one (I heard from one excited attendee that he's had his name down for the last three years so that'll give you an idea of how eager people are to study with Susan!). This popular course will enable students to expand and develop their experience of Botanical painting, using practical skills of detailed observation, drawing and painting. Some experience is necessary, with a maximum of twelve students on the course.

Contact Julia [ [julia@burrencollege.ie](mailto:julia@burrencollege.ie) ] to book your place or for more information.



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## July 2013

Su	Mo	Tu	W	Th	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

## August 2013

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				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

## September 2013

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1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

**July 15th 6.30pm**

Our annual trip to Bull island will take place on Monday evening. Meet at the visitors centre on Bull Island at 6.30pm. All are welcome, comfortable footwear is essential.

At the moment there will not be a trip to the Burren this year.

**July** - There will be no Irish Orchid Society Meeting

**August** - There will be no Irish Orchid Society Meeting

**September 2nd 7pm - Members Night**

We encourage members to come and bring an orchid to discuss. It may be healthy and in full bloom or sick and dying it doesn't matter, all questions and queries about orchid growing will be welcomed.

IRISH ORCHID SOCIETY  
[www.irishorchidsociety.org](http://www.irishorchidsociety.org)

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 POLLINIA and *Magairlíní*  
[www.pollinia.org](http://www.pollinia.org)

Back issues of POLLINIA are available in PDF format on the website.

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