

Botanica Scotia: Worldwide Botanical Art Exhibition May 18th 2025

To celebrate biodiversity in the crops that have been closely associated with the human

species over thousands of years.

Guidelines to Artists

Goal of exhibition 'to draw attention to the vast variety of food and useful plants available, in contrast with the relatively few varieties currently used in mass cultivation.'

The focus on biodiversity of crops in Scotland

In our preliminary call to artists we included some general information about the main exhibition goal and theme of Crop Diversity. This was subdivided into the 3 broad areas of Heritage Crops, Crop Wild Relatives and Ancient Crops. Since then the planning group has had discussions before and after the on-line discussion with our colleagues from ASBA. The most important point is that the original definitions set for the exhibition remain. These are **categorised** as follows:

HERITAGE / HEIRLOOM CROPS

These are crops that are not used in modern, large scale monocultural agriculture.

They are old cultivars/historic strains of food plants which have been grown and saved and replanted because they are considered valuable for flavour, productivity, hardiness and adaptability to climatic changes. Crops chosen should have been in cultivation in Scotland for at least 50 years.

3 criteria for identifying plants as Heritage (from Benjamin Watson in Taylor's guide to Heirloom Vegetables 1996)

- 1. The variety must be able to reproduce itself from seed.
- 2. The variety must have been introduced more than 50 years ago.
- 3. The variety must have a history of its own.

Most Heritage seeds are open pollinated i.e. the flowers are pollinated naturally by bees, moths, birds, bats, wind or rain. This means that cross pollination from one plant to another occurs. The resultant seeds have increased genetic diversity i.e. there is a variation in the genes in each plant. This variation within the population allows the plants to adapt to local growing conditions, climate changes, drought, increased salinity, disease, predation etc. Most commercial crops all have the same genes, they are a monoculture, they have no diversity. Therefore they are highly susceptible to diseases, pests and climate changes.

It is crucial to maintain these heritage crops as they are a resource pool of genetic diversity which can be tapped to help to improve commercial crops by hybridising.

• This includes anything grown in Scotland for at least 50 years that can be for food on your table, such as corn, wheat, barley, oats, to potatoes, tomatoes, apples, soft fruits, and other fruits and vegetables.

• Heritage crops cultivated as an industrial crop e.g. for energy, shelter, clothing, are also eligible. This includes early progenitors of utilitarian species, such as flax, linseed and heather, oil seed rape, white heather (used for industrial dying, whisky, jewelry, cosmetics, bricks roofing).

Medicinal crops - e.g. Digitalis for digoxin, cowslip (*Primula veris*), blaeberries (*Vaccinium myrtillus*) and herbs such as tuberous comfrey (*Symphytum tuberosum*) and Oregano Tomintoul Origanum vulgare).

Some Sources of seeds: Garden Organic, Chiltern seeds, Crocus, Dobbies, DT Brown, Franchi seeds, Garden Organic, Organic Gardening Catalogue, Plants of Distinction, Real Seeds, Sarah Raven <u>https://www.sarahraven.com</u>, <u>sowseeds.co.uk</u>, Suttons, Thomson and Morgan.

CROP WILD RELATIVES (CWR)

Crop wild relatives (CWR) are wild plant species that are related to our cultivated crops and that contain wider pools of genetic diversity that can be, and in many cases are being harnessed for use in crop breeding. (Fielder et al 2016).

There are estimated to be 50,000 to 60,000 crop wild relatives species in the world.

They are genetically related to cultivated crops but have not been domesticated and are still found growing wild in natural environments. They therefore have a much greater genetic diversity than their cultivated cousins. This diversity means that they are a rich source of adaptive characteristics such as heat, drought, flood and salinity tolerance and disease resistance. These important characteristics can be bred back into domesticated crops, using traditional crop breeding techniques, to make our crops more resilient to climate change. CWR's are being threatened by deforestation, expansion of cities and agriculture and climate change. If they disappear from the wild, the valuable gene pool they contain will be lost forever. (Ref: kew.org and croptrust.org)

In summary wild species can be hybridised with cultivated crops to impart a new characteristic to the cultivated crop, or that are foraged wild plants.

- Wild plants that are related to important food and utilitarian crops. A few examples are: wild millet, wild potato or tomato species, sunflowers.
- Wild edible foods that are foraged. For example, wild garlic, fungi, plums, wild berries, sea buckthorn berries. More than a third of wild fruit and veg relatives require urgent conservation according to the Crop Trust. <u>https://www.croptrust.org/news-events/</u>

ANCIENT CROPS

Those that have been cultivated for hundreds or thousands of years in the same form.

The basis of agriculture across Europe is based on

3 grains - emmer wheat, einkorn wheat, barley

4 pulses - lentil, pea, chickpea(Mediterranean) and bitter vetch (mainly for animal feed and for the poor)

This category also includes foods cultivated and foraged by indigenous people.

Examples in Scotland include, Bere barley (Bere is the old word for barley), fruits like blaeberries, brambles, elderberries, raspberries, rowan berries; fungi, hazelnuts, oats and rye, seaweeds, oats, turnip [white and baigie or neep], cabbage, kale or kail, potatoes [e.g. Shetland Black].

Sphagnum moss used for wound dressings, juniper for flavouring. Flax for fibres(linen) and linseed for oil.

<u>seedaholic.com</u> has a list of 90 ancient crops seeds available (it also lists heritage seeds) Examples of ancient seeds relative to Scotland are,

Alexander's (black lovage), Ramsoms garlic, Burdock, Callendula (used both culinarily and medicinally) Celery, Comfrey, Crambe maritima (sea kale), Watercress, Rock samphire, Cardoon, Dandelion (as Callendula), Evening primrose, Feverfew, Hyssop, Woad, Lavender, Leaf beet, Nettle, Pennyroyal, Purslane.

Kings Seeds sell ancient grain seeds of barley and wheat. They also own Suffolk Herbs which may have seeds of interest. See https://www.kingsseeds.com

Other examples are, some varieties of sorghum [grass family], farro wheat, Bere barley (Bere baps from Orkney), cowpea, and nuts, sphagnum moss, juniper. This category also includes foods cultivated, gathered, and selected by indigenous people around the world: oats, turnip [white and baigie or neep], cabbage, kale or kail, potatoes [e.g. Shetland Black] and many others.

Eligibility to exhibit criteria

- Entries can be made in one country only therefore you must be resident in Scotland.
- You are not required to be a member of the SSBA.
- The painting must fall into one of the categories listed above for the Botanica Scotia exhibition and you need to **explain why you have chosen the particular subject and into which category it falls.**
- The painting should be an accurate Botanical Illustration, showing **if possible**, all parts of the chosen plant, such as roots, stem, leaves front and back, flowers, bud, mature flower, (dying flower optional), seedpods. Fungi, lichens and algae can be included but must be a 'crop'.
- Everything should be drawn life size where possible, and include x1 indicated on the illustration. When this is not possible an indication of scale other than x1 should be included.
- Any parts which are enlarged must be accompanied by the correct scale. If different sizes are included in the illustration the different scales should be included
- Colours, where used, should be accurately matched to the specimen.
- If the specimen is not 'true to type' the artist should, if possible, select a better more true specimen
- A general 'flower painting' will not be accepted.
- The correct, binomial, Latin name of the plant should be given in *italics* not the common, local name, although this and the Gaelic may be added after the Latin name. Failure to do this could result in disqualification or rejection of your painting.
- You will need to confirm when you complete the application form that the art work is your original work and does not infringe others copyright.
- There is no limit to number of digital art works that can be submitted. Should there be a physical exhibition, numbers may be limited for that.

Medium

Two-dimensional original botanical art. No photography, no digitally generated work, and no threedimensional work will be accepted.

The medium used can be watercolour, acrylic, graphite, pen and ink, coloured pencil, gouache or a combination of these. Other mediums such as oils and pastels may be considered if the standard of work presented includes the accuracy required for botanical illustration.

Image definition

Your submission must be either professionally scanned or photographed to provide an accurate digital image. Each image should be: - 300dpi with minimum height of 3000 pixels in jpg format.

Each file must have the latin name of the image and your name attached to the file and should be sent to $\underline{submissions@botanicascotia.uk}$ by WeTransfer $\underline{https://wetransfer.com/}$ at no cost for up to 2GB. Full details will be given in submission form.

Entry fee

There will be an entry fee of $\pounds 15$ for each art work. The fee applies to submission for assessment and curation, irrespective of selection or nonacceptance for exhibition.

There is the possibility of staging a physical exhibition and if so there may be additional associated costs such as venue hire.

Payments can be made on line and will be requested when work is submitted in November 2024.

Sale of artwork

You will be able to indicate on your intention to submit form if you wish to make your entries available for sale. There will be a small percentage commission from sales if there is a physical exhibition.

Curation of submissions The scanned images of paintings will be judged by an experienced and prestigious panel, including botanical artists and a botanist. The paintings will be assessed according to three main criteria: scientific accuracy, aesthetic quality, and artistic skills and proficiency.

For a general idea of the style and quality of work, see the 2018 Worldwide Botanical Art Exhibition at https://www.botanicalartandartists.com/-world-wide-exhibition-of-botanical-art-2018.html

Notification Artists will be informed by email of judging decisions. An artist who has work accepted for exhibition must agree to allow work(s) to be shown at any physical exhibitions which may be arranged in connection with the 'World Day of Botanical Art'. Copyright of all works of art belongs to and remains with the artist.

Our Timeline

August 2023	Announcement and initial call to artists sent out
January 2024	Guidelines to artists
March 2024	Intention to submit
September 2024	Submissions open and scanned images received
December 30th 2024 – midday	Submissions close for submission form
	NOTE Images may be submitted up to January 15th
January 15 th 2025	Final date to supply images
Late January 2025	Exhibition Curation & Judging
Late January 2025	Response to artists by email
May 14th 2025 10.30am – midday	Delivery of paintings to Gallery
May 15th – 21st 2025	Exhibition at The Custom House Gallery
May 21st 2025 (time TBA)	Collection of paintings from gallery

How to get in touch

Please email <u>info@botanicascotia.uk</u> if you need some guidance about your selected crop. One of us will get back to you or we will refer your question to our expert Botanist. See our website at <u>https://botanicascotia.uk/</u>

Resources and References

- The American Society of Botanical Artists Worldwide Day of Botanical information at https://www.botanicalartworldwide.info/
- The James Hutton Institute are currently researching and growing Bere Barley <u>https://www.hutton.ac.uk/search/results?terms=Bere+Barley&search-submit.x=0&search-submit.y=0#results</u>

https://www.hutton.ac.uk/news/crop-wild-relatives-pre-breeding-data-available-germinate-3

- Scotland the Bread in Fife have a 'Soil to slice' scheme that provides Bere barley and other heritage grain seeds to growers. If artists interested they can be put in contact with local growers as scarce seeds will not be given to artists. https://scotlandthebread.org/our-work/grain-research/
- SASA Science and Advice for Scotland. The SASA resources are located at https://www.sasa.gov.uk/ and databases include information about barley, oats, rye, triticale and wheat

<u>AHDB Potato Variety Database</u> <u>European Cultivated Potato Database</u> <u>Scottish Landraces & Traditional Varieties Website</u>

- Scottish Natural Heritage https://www.nature.scot/scotlands-biodiversity
- Poyntzfield Herb Nursery has a list of Plants native and naturalised in Scotland <u>https://www.poyntzfieldherbs.co.uk/catalogue1.asp?sortby=engname&colhead=scotnative&</u> req=yes&doctitle=Plants%20native%20and%20naturalised%20in%20Scotland
- Fielder H, Smith C, Ford-Lloyd, Maxted N 'Enhancing the conservation of crop wild relatives in Scotland' Journal for Nature ConservationVolume 29, February 2016, Pages 51-61 https://www.sciencedirect.com/science/article/abs/pii/S1617138115300303
- <u>https://scotlandsnature.blog/2015/12/16/wild-about-crop-relatives/</u>
- https://www.rbge.org.uk/news/articles/looking-at-crop-wild-relatives/
- Scotland's Rural College <u>https://www.sruc.ac.uk/all-news/large-scale-study-reveals-wheat-</u> <u>diversity-for-crop-improvement/</u>
- Glasgow Botanic Garden Friends of <u>https://glasgowbotanicgardens.com/projects/food-security-and-climate-change/</u>
- SEFARI https://sefari.scot/node/5449
- Watson B Guide to Heirloom Vegetables (1996) Taylors