

# THE BOX

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Gardens Cornwall



KS2 SCIENCE RESOURCE

## MAKE YOUR OWN HERBARIUM

# WHO IS SIR JOHN ST. AUBYN AND WHAT IS A HERBARIUM?



**Sir John St. Aubyn** was born at Golden Square, London on 17 May 1758. He served as High Sheriff of Cornwall (at the age of 23), and went on to become a Fellow of the Royal Society, a Fellow of the Linnean Society, a member of Parliament, Fellow of the Society of Antiquarians, Fellow of the Geological Society of London, Fellow of the Society of Arts and Provincial Grandmaster of the Freemasons.

## **Clearly he was a very busy man!**

Sir John was captivated by science and the arts and was a keen collector. His particular interest was for collecting minerals, but he also had an interest in botany, and he created his own herbarium.

The Sir John St. Aubyn collection at **The Box, Plymouth** is an important 18th century collection. It consists of a substantial mineral and herbarium collection.

A herbarium is a collection of carefully-dried plants. St Aubyn's herbarium gives us a fascinating glimpse into the botanical world in the 18th century. It contains not only plants that have been collected locally, but also specimens which have been collected from early plant nurseries and important gardens.

# MAKE YOUR OWN



Why not make your own herbarium and preserve plant specimens from your garden or your school's garden?

To start your own herbarium you will need:

- A pile of old newspapers
- Four sheets of heavy cardboard
- Two or three old bricks or other heavy weights
- Small pieces of card, and pencils
- Scissors for cutting samples of leaves
- A4 sheets of thin white cardboard, or heavy paper
- PVA glue
- A folder or lever arch file
- A guide book to local plants

Before you collect anything, it's very important to know about what you can and cannot collect. In Britain all wild plants, including wildflowers, mosses, algae, fungi etc, are protected under the **Wildlife and Countryside Act of 1981**. Before you pick anything you must get permission, so it is probably a good idea to stick to plants growing in your own or school garden, or better still, buy some seeds and grow your own plants and flowers to use.

A guide to local plants will also be useful in identifying plants that might be **harmful or poisonous** to humans. Many plants and flowers found locally can be dangerous and may lead to severe illness or death. Please take care when selecting your plants.



# TIME TO START COLLECTING

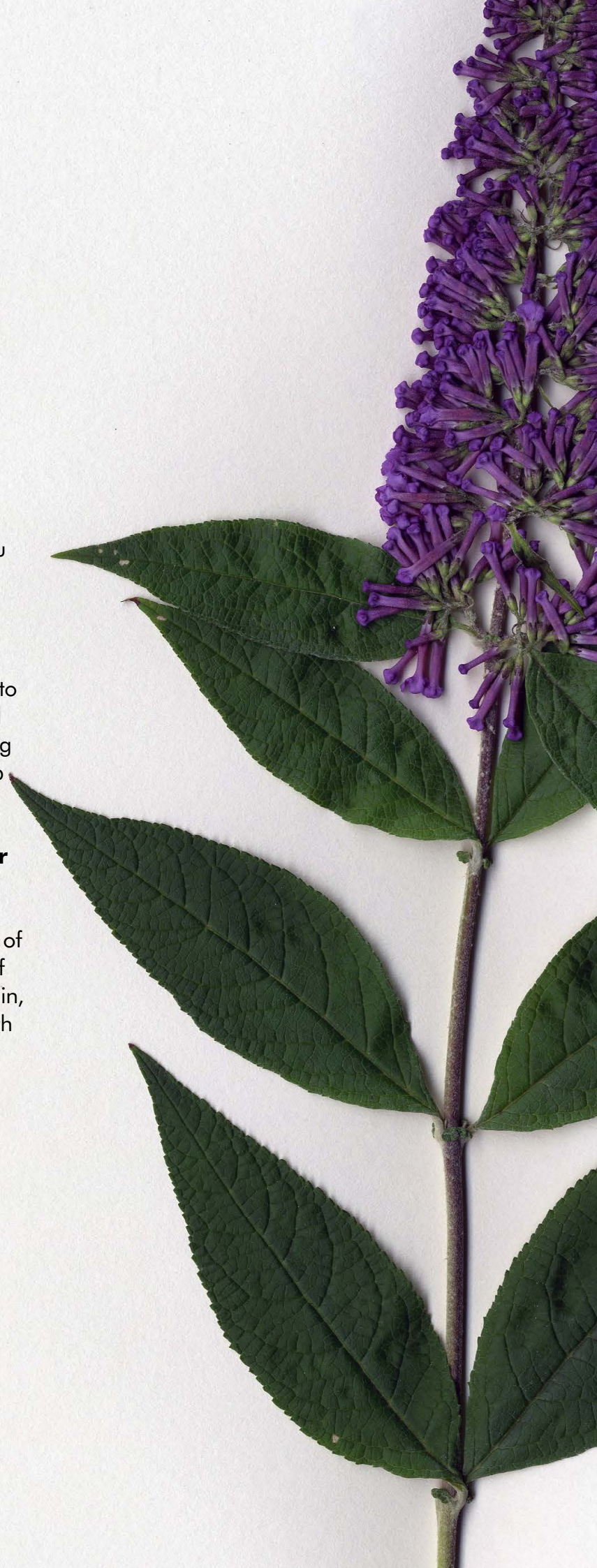
## Try one specimen first.

Watch your garden plants and trees carefully to see when their leaves and flowers become fully grown. See if you can identify which species you are selecting with a book such as the *RHS Encyclopedia of Plants and Flowers*, which you might be able to find in your local library.

When the flowers or leaves look ready it's time to collect a sample. Be sure to ask permission and check that the plant is not harmful before cutting off any stems. If you use scissors, get some help from an adult.

## Make sure you can fit the sample on your A4 page!

For each sample, write down the date, the kind of plant, the location and your name on a piece of card or paper and keep it with the sample. Again, make sure this label fits on your page along with your specimen.





# DRY, DRY, DRY YOUR PLANTS

Once you have a specimen, you will need to start to dry it out thoroughly.

**Buddleia davidii grows wild everywhere in Plymouth, but we have still only taken a small piece as the bees and butterflies love it.**

Find a safe place on a shelf or bench to leave your specimen for a couple of weeks to dry. The area should have good air circulation to carry away moisture.

Place two layers of heavy cardboard on the shelf or bench, and then spread out some old newspapers on the cardboard. Put your specimen between about 10 layers of newspaper, and remember to keep your information label with it. Add two more layers of cardboard, and put your bricks or weights on top of that.

After a week, have a look at your specimen. If it feels very dry then you're ready to mount the leaves on the white cardboard. If not, repeat for another week or so.





# STICK 'EM UP!

Once your specimen is very dry, you are ready to stick it to your A4 card or paper sheet.

Use PVA glue to attach the specimen to the sheet, carefully choosing how to position it so you can add your information label. Usually these are placed in the bottom-right corner of the sheet, but you can do it however you like. Ours is placed bottom-left in this document.

**Make sure you cover the back of your specimen with the glue; you don't want to have to start all over again!**



## Herbarium of The Box, Plymouth

**Name:**

Buddleia (Buddleja davidii)

**Location:**

The Secret Box Garden, Tavistock Place

**Date Collected:**

Friday 28th July 2017

**Description:**

Dark green leaves, bright purple flowers. Many flower heads per plant. Growing from top of stone wall.



# PROTECT YOUR SPECIMEN

Once the glue is dry, your plant will last for years and years. St Aubyn's amazing herbarium sheets were made over 200 years ago – there is no reason why yours shouldn't last that long either.

## Try making more sheets using other plants from your garden.

Keep each species of plant in its own file folder and store in a place where they will stay cool, dry and flat. By placing your label in the bottom right corner you can turn the pages without damaging the specimen.

Remember that they are still plants and so if they get moist they can rot, or if they are found by insects or mice they might get eaten.



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# TEACHER AMBASSADORS

The Learning and Engagement Team at The Box, Plymouth are busy preparing a brand new schools service ready for when we open in 2020, and we'd love you to be involved. We're working to develop three main strands of our new service:

- A set of curriculum-linked **facilitated sessions** for all key stages, that use our new galleries to explore history, science and art topics
- Brand new **online resources** – including games, quizzes, films and activity ideas
- A set of **loan boxes** of artefacts and resources that you can use in your classroom

We want to ensure that this new schools service meets your needs as a teacher, so we are setting up a consultant group of Teacher Ambassadors for The Box.

Being a Teacher Ambassador will support your professional development through the chance to develop new skills in how to use objects to enhance curriculum learning, and you will also be proud in the knowledge that you've made a real difference to how school students experience The Box when it opens in 2020.

If you'd like to become one of our Ambassadors, please email:

**[museumvisits@plymouth.gov.uk](mailto:museumvisits@plymouth.gov.uk)**

   @theboxplymouth  
**[theboxplymouth.com](http://theboxplymouth.com)**



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