Plant Explorers

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What’s a Plant Explorer?

- You, probably!
- Those who seek to discover or document
  - Botanists
  - Naturalists
  - Photographers
  - Painters
- What’s a Plant Hunter?
  - Acquisition
  - Collectors
  - Researchers
  - …and others

What’s a Plant Explorer?

“When I consider the melancholy fate of so many of botany’s votaries, I am tempted to ask whether men are in their right mind who so desperately risk life and everything else through the love of ‘collecting’ plants.”
- Carolus Linnaeus
  Glory of the Scientist. 1737
“Nobody climbs mountains for scientific reasons. Science is used to raise money for the expeditions, but you really climb for the hell of it.”
-Sir Edmund Hillary

“What’s that? I want one.”
- Erin Alvarez, also most plant nerds...

Who are some of the earliest plant explorers you can think of?

Explorers...Plant Explorers
- 4th C BCE: Aristotle
  - Traveled to Asia
  - Kept a teaching garden in Athens at the Lyceum
  - Used binomial nomenclature, but gets no credit for it
  - Taught Theophrastus, the father of botany
  - Clados = twig
  - One of his most famous students?
Explorers...Plant Explorers

- Alexander the Great
  - Collected plants on his travels for his mentor, Aristotle
    - Asia (India, China) to Europe (Greece, Rome)
  - Corresponded with Aristotle about bamboo
  - Cotton, pepper, cinnamon, bananas, banyan tree, oranges (golden apples?)

Spice is nice: 15th Century

- Spain, Portugal, Netherlands
  - Competed for access to East Indies
  - Gold, spices, glory

Shout out: Name an important explorer from this era.

Spice is Nice: Christopher Columbus

- Looked for and found spices and plants
  - Tobacco, potatoes
- Brought old world plants to the new world
  - Wheat, barley, sugarcane, grape vines
  - Invasive?
Spice is Nice

- 1498: Vasco da Gama
  - Landed at Tierra del Fuego: “For Christ and spices!”
  - Went to India for black pepper

- Black Pepper Tangent
  - 400 BC: Greeks traded with India
  - 1st invasion of Rome by Alaric the Goth (Germans!)
  - 15th C Europe saw a 1:1 pepper to gold ratio

18th Century Explorers

- England joins the party
- The Bartrams
  - Pennsylvania Quakers
  - Father (John) and son (William)
  - 1729: John Bartram started a botanical garden
  - Plant trading with European patron support
  - Early marketing genius? North American plants for European gardens

18th Century Explorers: Bartram

- John Bartram
  - King (Farmer) George III’s North American Botanist
  - 1760: Explored southern North America
  - Described flowering magnolia relative in swamps of southeastern Georgia: Franklinia alatamaha
  - Named for Benjamin Franklin
  - Extinct in the wild since 1790
  - Grown commercially
18th Century Explorers: Bartram

- William Bartram
  - 1770s: Explored southern North America
  - Wrote "Bartram’s Travels"
  - Puc-puggee, Payne’s Prairie
  - Described: Oakleaf hydrangea, Flame azalea, Spider lily, Bottlebrush buckeye, Venus flytrap, pitcher plant, etc.

18th Century Explorers: Banks

- Joseph Banks: Rock star botanist?
  - Explored Newfoundland and Labrador
  - Wealthy, landed
  - 1768 Endeavour voyage with James Cook
  - Friendship with George III, Carl Linnaeus
    - Banksia spp, Rosa banksiae
  - Retirement?

18th Century Explorers: Banks

- (unofficially) Started Kew Gardens!
  - First true botanical garden
  - with King George III’s support
  - Brought 7,000 plants to England over 30 years
  - Tree peony, cycads, tiger lily, wisteria, many more...
  - 42 years as president of Royal Society
18th Century Explorers: Linnaeus

- Carl (Carotus) Linnaeus
- “Father” of binomial nomenclature
- goofed off in school
- Explored Lapland as a student
- First ethnobotanist?
- Married a local
  “She turned almost overnight into a dragon
  ‘He was to regard her with respect and terror for the rest of his life’

18th Century Explorers

- Capt. William Bligh
  - 1787: the *Bounty*
  - Breadfruit expedition to Tahiti
  - Didn’t end well
- Recommended by Joseph Banks
- Served under Cook

18th Century Explorers

- Jeanne Baret
  - 1st woman to circumnavigate the globe
  - Raised as an herbalist in France
  - Snuck on board the *Etoile*, disguised as Captain de Bougainville
  - Outed in Tahiti
  - Relocated to Mauritius
  - Returned to France pensioned by French Navy
19th Century Explorers

Random fact!

- The world’s largest flower first described in Sumatra by Joseph Arnold
  - 30” diameter, up to 22 lbs
  - *Rafflesia arnoldii*
  - Namesake: Sir Thomas Raffles

19th Century Explorers: Lewis and Clark

- Early 1800s in the Americas
- Lewis and Clark
  - Great Plains
  - Berberis, fritillaries, lisanthas, ladyslipper, tansy, valerian
- Thomas Jefferson
  - Lewis and Clark collected partly for Jefferson
  - Madame de Tessé: *Koelreuteria paniculata*

19th Century: Fortune

- Robert Fortune
  - British East India Company-introduced tea from China to India in 1848
    - Collected illegally, in disguise
    - Blue peonies, tea, peaches
  - Balloon flower, kumquat, bleeding heart, chinese fringe tree, abelia, weigela
19th Century: North

- Marianne North
  - Botanical artist
  - English self-taught woman of means
  - Well-travelled, painting along the way
    - Jamaica, US, Canada
    - Brazil, Southeast Asia, India
    - Australia, New Zealand, Africa
  - Taught Ellis Rowan in Australia
  - Retired in England
  - Established a gallery at Kew

20th Century

- George Forrest: early 1900s
  - Chemist: medicinal plants
  - Australian gold rush
  - Royal Botanic Garden Edinburgh
  - Collected rhododendrons in SW China
  - Escaped in disguise
  - Collected 1200 species, including rhododendron, buddleias, pieris, cotoneasters, alliums, and primrose

20th Century

- David Fairchild
  - The Kampong, Fairchild Gardens
  - 1st chief, USDA Sections of Plant and Seed Introduction (PI number)
  - Introduced over 200k plants to the US
  - Soybeans, mangoes, nectarines, dates, ficus, you name it!
20th Century

- Richard Evans Schultes
  - 1938: Harvard graduate student describes *Panaceolus campanulatus*
  - 1957: investment banker reads articles, goes to Mexico for mushrooms and writes article in *Life* magazine
- Magic Mushrooms are born
- Ethnobotany
  - Curare, taxus, aspirin, many more
- Indiana Jones?

Where are they now?

- Modern plant explorers still very active
  - Botanical gardens
  - Conservation efforts
  - Writers
  - Nurserymen
  - Photographers
  - Illustrators
  - You?

Thank You!

“In every walk with nature one receives far more than he seeks.”
- John Muir

Questions?
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