

講座

2019年5月3日
19:00 - 21:30

錫安社會服務處
綜合青少年服務中心



環保基金
公民科學家計劃
由認識入侵物種到保育兩爬多樣性

諮詢機構



主辦機構



詳情及報名

hkherp.com/herpscientist

在此刊物上/任何項目活動內應用的標頭圖片、研究或與、建議或建議，
並不一定反映或增補別行政區政府、環境及自然保育基金或香港及環境運動委員會的觀點。

內容

1915-2045

[講座] 認識入侵種及兩爬研究方法

2045-2045

發問環節

2045-2050

小休

2050-2115

[小組研習匯報]

2115-2130

[小組研習] 視覺資訊圖表





講座(二)
認識入侵種及兩爬研究方法
宋亦希博士





發問環節





小休





小組研習: 視覺資訊圖表

小組研習：視覺資訊圖表 (Infographic)

格式：視覺資訊圖表(Infographic)

題目：依照所屬組別의 入侵物種題目

提交日期：5月30日(星期四) 23:59 或之前

提交方法：將PDF格式的視覺資訊圖表上傳到 HKHerp Portal



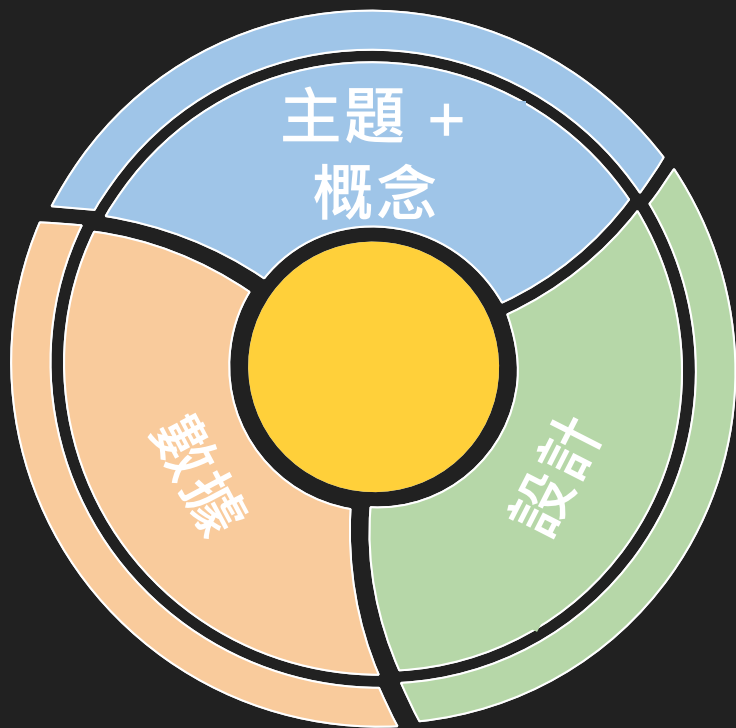
密碼：hkherpscientist

圖像規格：

像數：3508 px × 4961 px (A3 size)



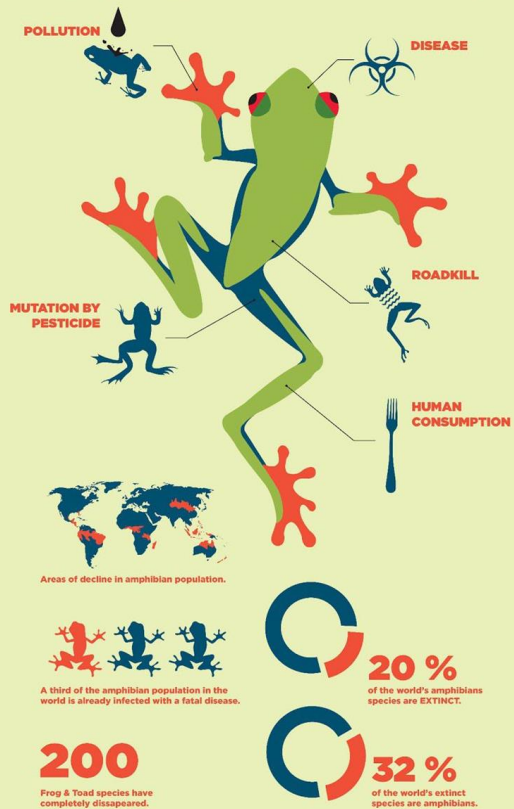
視覺資訊圖表：製作教學



視覺資訊圖表：製作教學

1. 主題 + 概念
 - 設定一個能夠吸引讀者的主題
 - 以故事串連你想帶出的訊息
 - 入侵物種的：
來源、生命史、傳播途徑、影響、解決辦法

WHAT IS KILLING THE FROGS?

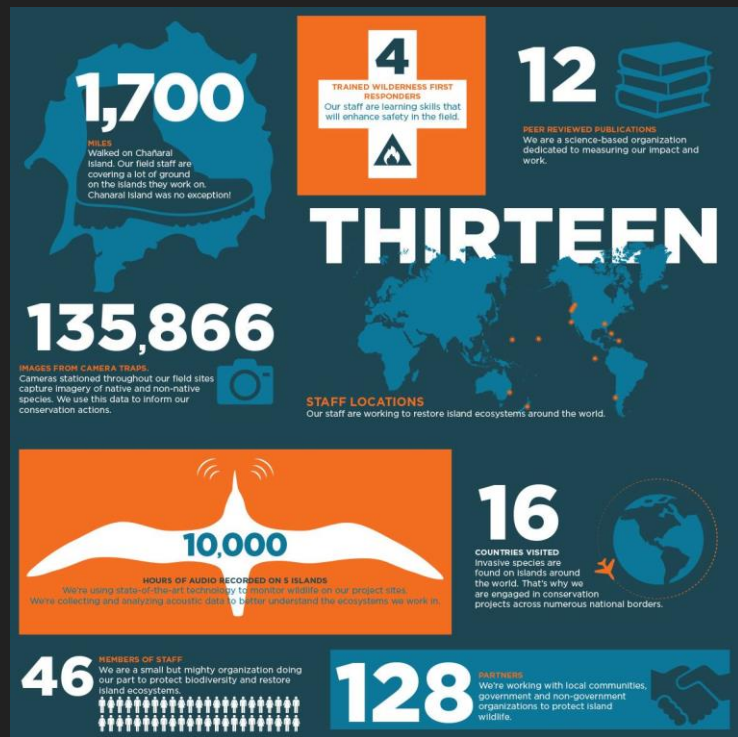


視覺資訊圖表：製作教學

2. 收集數據

- 善用網上資料 (例如學術論文)
(請確認數字的真確性)
- 尋找一些能讓讀者留下深刻印象的數字

Of the three species discussed here, only *E. coqui* has been well-studied in its native range. It lays **4–6 clutches/yr**, each with **16–41(mean = 28) eggs/clutch** (Townsend and Stewart 1994). Generation time is approximately eight months (deduced from information provided in Townsend et al. 1984; Townsend and Stewart 1994; Turner and Gist 1970). We have received anecdotal reports indicating that population expansion of *E. coqui* at two sites has been rapid and in accordance with expectations based on this prior ecological knowledge. The owners of the large Ha-



© Janice McCoy



ISLANDS REPRESENT



53%

OF THE EARTH'S
LANDMASS

UNEP-WCMC 2015



75%

BIRD, AMPHIBIAN,
MAMMAL, AND
REPTILE EXTINCTIONS

Tarshy et al. 2015



41%

OF ALL CR AND EN
TERRESTRIAL VERTEBRATES

Spatz et al. 2017



19%

AVIAN
BIODIVERSITY

Tarshy et al. 2015

INVASIVE ALIEN SPECIES



86%

OF RECORDED EXTINCTIONS
LINKED TO INVASIVES
OCCURRED ON ISLANDS

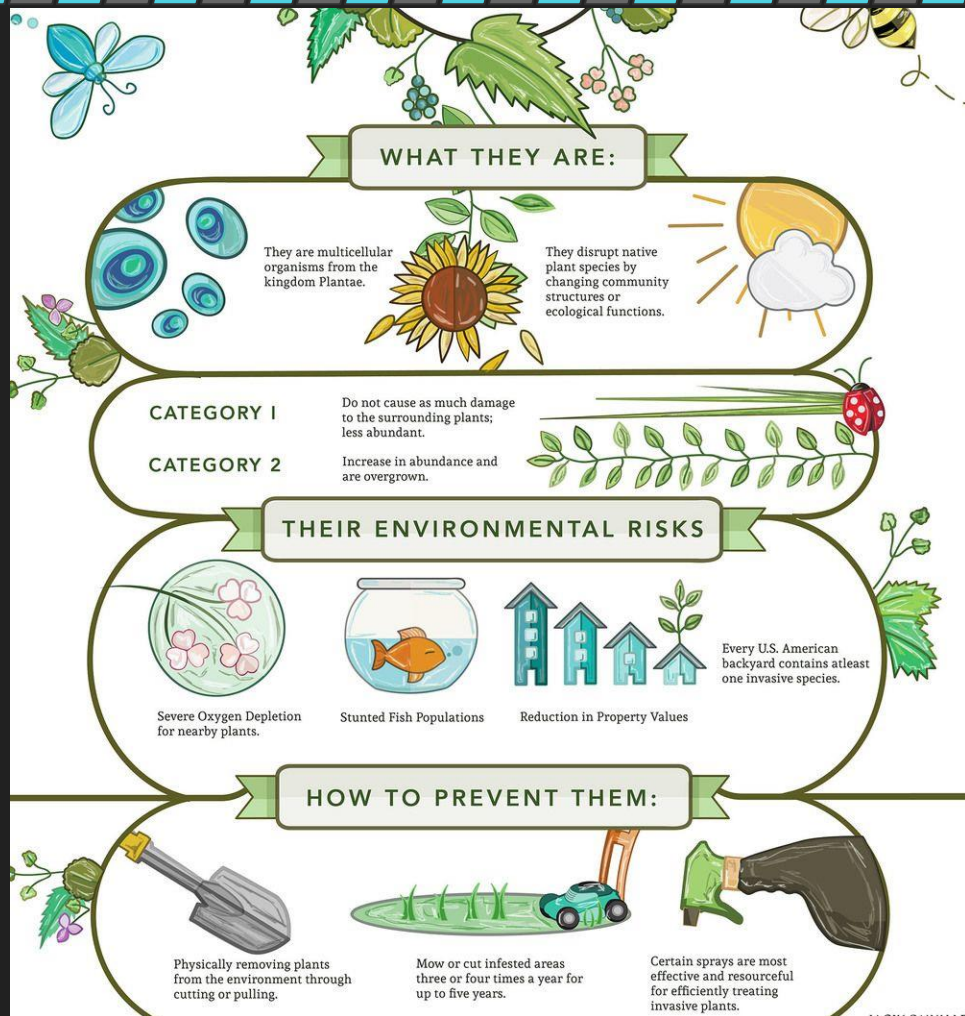
Ballard et al. 2015



視覺資訊圖表：製作教學

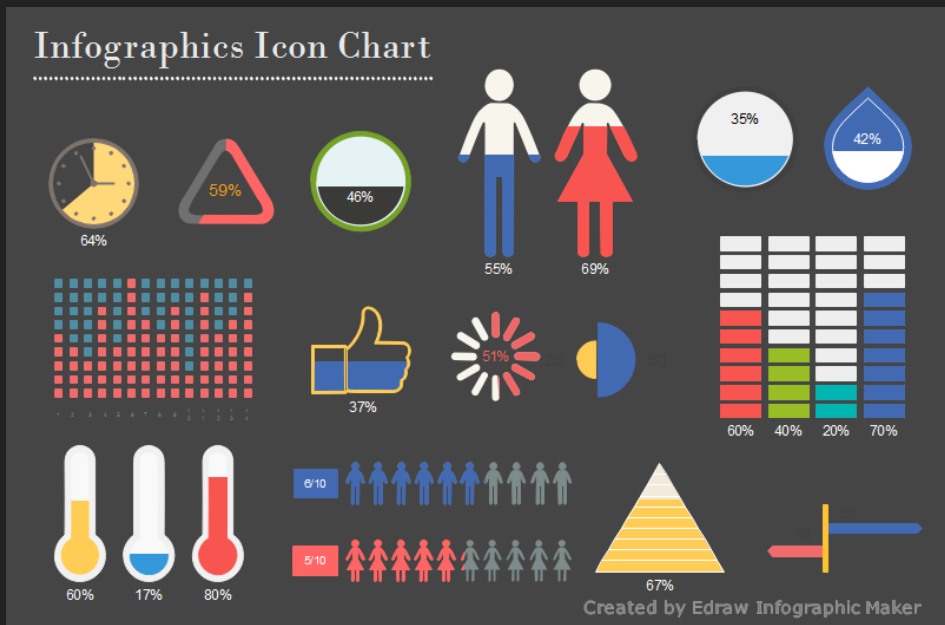
3. 設計 - 貼士1：多圖少字

- 盡量圖像化你所想帶出的信息
- 使用顏色鮮豔的圖像



視覺資訊圖表：製作教學

3. 設計 - 貼士2：善用圖表

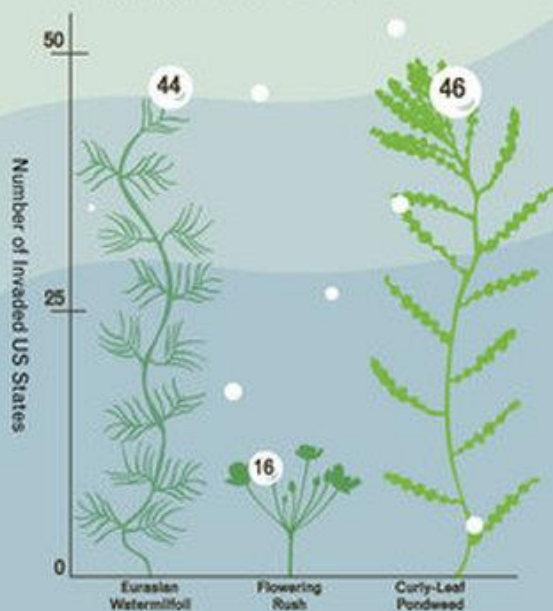


EURASIAN WATERMILFOIL, FLOWERING RUSH and CURLY-LEAF PONDWEED

Invasive Plant Species of the Great Lakes

The Great Lakes area has been invaded! Species of plantlife which originate in Europe have made their way to the largest group of lakes in America, as well as the rest of the country. These plants, which developed in an entirely different ecosystem, have spread like wildfire across these once balanced and

peaceful lands. The plants featured on this poster are the three most threatening invasive species in the Great Lakes area due to their hardy nature and sneaky means of spread. The following information will explain just how dangerous these plants are to the environment around them.



視覺資訊圖表：製作教學

3. 設計 - 貼士3：善用Icon和插圖



Lionfish: Invaders below the surface



11

11TH HOUR RACING

Surface

LIVE IN ALL HABITATS

1m - 300m DEEP

BUT PREFER STRUCTURES
(LIKE CORAL REEFS)

18 VENOMOUS
SPINES

CANNOT SURVIVE IN WATER
TEMPERATURES BELOW
50° FAHRENHEIT

BECOME SEXUALLY MATURE

< 1 year

SPAWN APPROXIMATELY

30K - 40K

EGGS EVERY 3-5 DAYS



EAT AS MANY AS

70 DIFFERENT SPECIES

CAN CONSUME

20 fish

IN 30 MINUTES



CAN EAT PREY UP TO
1/3 THEIR BODY
LENGTH

RELEASED, ACCIDENTALLY OR DELIBERATELY,
INTO THE ATLANTIC AND HAVE SUBSEQUENTLY
INVADDED THE WATERS OF THE EASTERN UNITED
STATES, CARIBBEAN SEA, GULF OF MEXICO
AND BERMUDA.



1985



2000



2005



2010



2015



13 in

NATURAL HABITAT



18.75 in

ATLANTIC

0

NATURAL PREDATORS
IN ATLANTIC



DENSITY IN
NATURAL HABITAT



17X
DENSITY IN
ATLANTIC

THREAT TO CORAL REEF ECOSYSTEMS

AS LIONFISH **DEVOUR FISH** THAT EAT ALGAE, WHICH GROW ON CORALS,
REEFS ARE EVENTUALLY **SMOTHERED AND DIE**.

A SINGLE LIONFISH CAN REDUCE
THE FISH ON A REEF BY
80% IN JUST 5 WEEKS.

80%

300m



#EatLionfish

Sources: NOAA, Bermuda Underwater Exploration Institute, REEF.org



視覺資訊圖表：製作教學

3. 設計 - 貼士4：善用設計軟件/網上資源



<https://www.easel.ly/>



<https://piktochart.com/>



<https://venngage.com/>



<https://www.visme.co/>



<https://www.canva.com/create/infographics/>



<http://vizualize.me/>

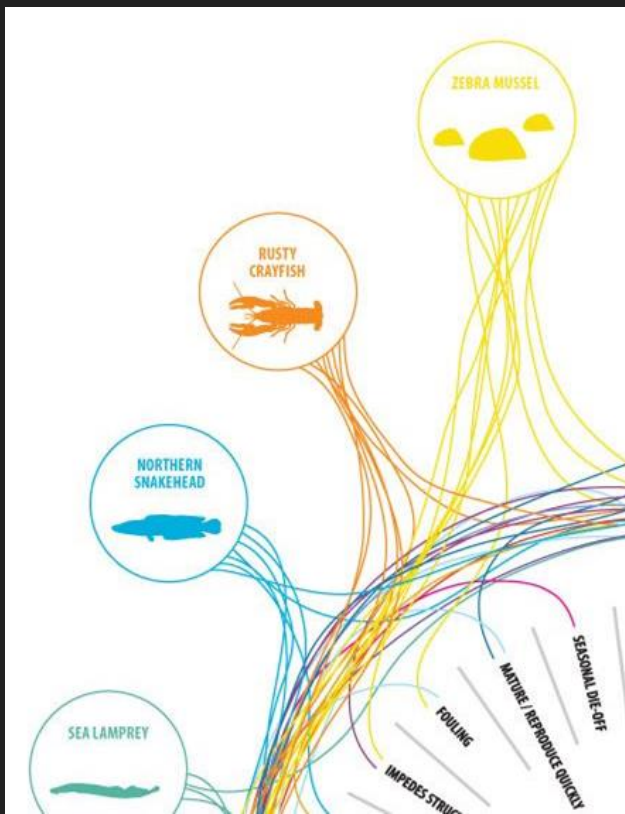


<https://infogram.com/>



視覺資訊圖表：製作教學

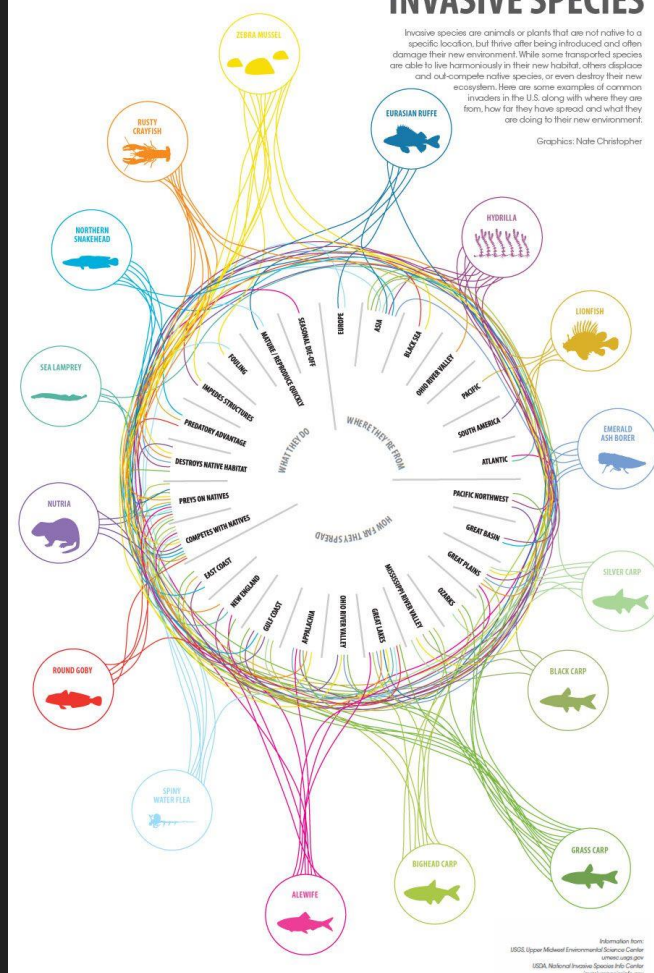
反面教材



INVASIVE SPECIES

Invasive species are animals or plants that are not native to a specific location, but thrive after being introduced and often damage their new environment. While some transported species are able to live harmoniously in their new habitat, others displace and out-compete native species, or even destroy their new ecosystems. Here are some examples of common invaders in the U.S. along with where they are from, how far they have spread and what they are doing to their new environment.

Graphics: Nate Christopher



Information from:
USGS Upper Midwest Environmental Science Center
www.usgs.gov
USGS National Invasive Species Information Center
www.invasivespecies.gov
USGS Non-Indigenous Aquatic Species
www.nias.usgs.gov
Lake Sturgeon
lakesturgeon.com/InvasiveSpecies

Violent crime rates

1990=100

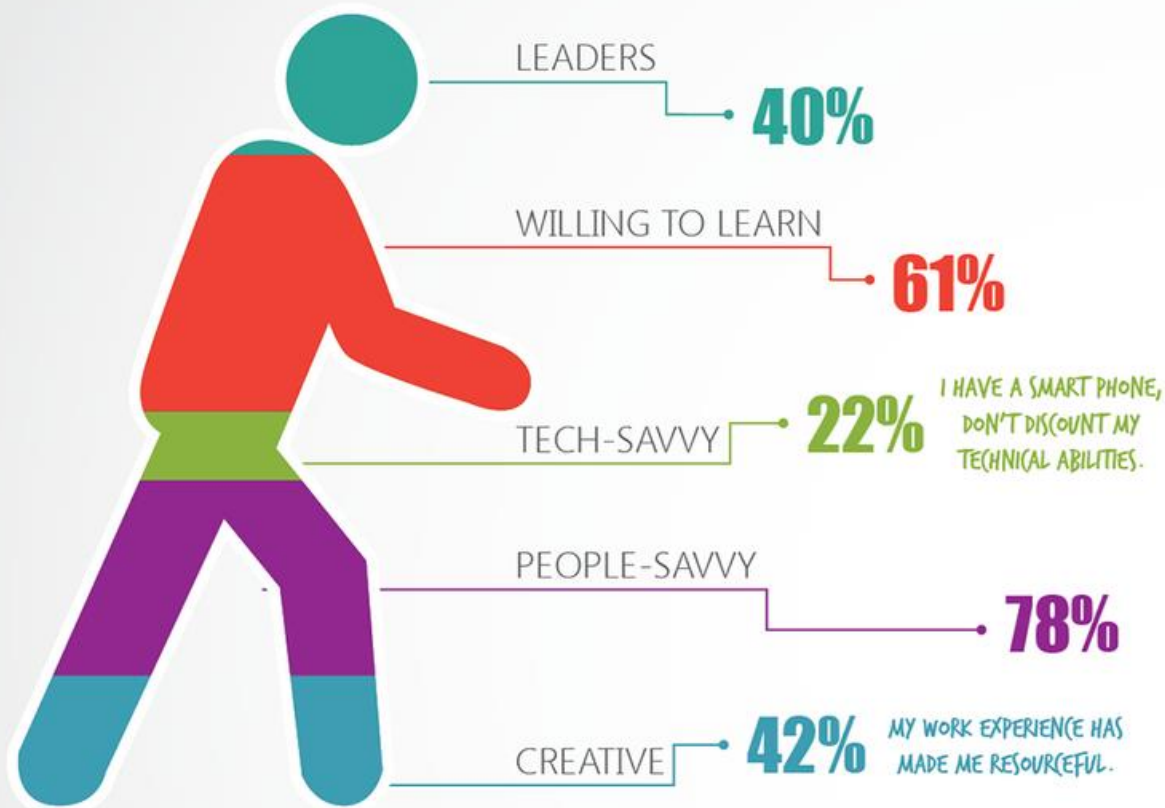
Philadelphia Houston Phoenix San Diego Dallas Los Angeles New York



Sources: Federal Bureau of Investigation; The Economist



HOW **BOOMERS** DESCRIBE THEMSELVES





ATLANTA FALCONS

LONDON 2014



THE TEAM AND
STAFF WILL TAKE
**THREE
PLANES**
TO LONDON.



- | | | | | | | | |
|----------|---|---|----------|--|---|----------|---|
| 1 | ATLANTA TO BALTIMORE
577 MILES
(1.5 HOURS) | → | 2 | BALTIMORE TO LONDON
3,641 MILES
(7 HOURS) | → | 3 | LONDON TO ATLANTA
4,210 MILES
(10 HOURS) |
|----------|---|---|----------|--|---|----------|---|



COFFEE

①

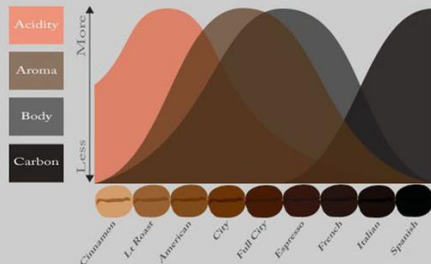
②

③

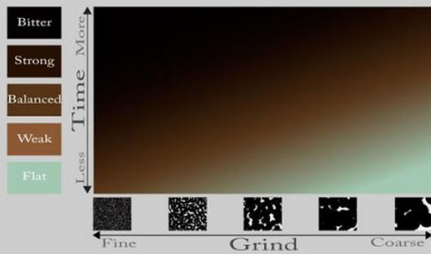
① Beans



② Roast



③ Brew



COQUI FROGS

BELIEVED TO HAVE ARRIVED FROM FLORIDA IN 1988
AMONG A SHIPMENT OF POTTED PLANTS

ORIGINALLY FROM PUERTO RICO,
HAWAII'S POPULATION IS 3X
THAT OF ITS HOMELAND

NATIONAL GEOGRAPHIC
NAMED THEM THE NOISIEST
AMPHIBIAN ON EARTH

DETRIMENTAL TO HAWAII'S FRAGILE ECOSYSTEM
DUE TO RAVENOUS APPETITES WHICH COMPETE WITH
ENDEMIC BIRDS & ENDANGERED FRUIT BATS

NO LARGER THAN A QUARTER,
MALES CAN HIT 90 DECIBELS,
AS LOUD AS A LAWN MOWER

BIG ISLAND IS KNOWN TO HAVE MORE
THAN 10,000 WITHIN A SINGLE ACRE OF LAND

BIKEMAUI.COM

HAWAII WEB GROUP



如何提交簡報：使用 HKHerpPortal



環保基金：公民科學家計劃 - 由認識入侵物種到保育兩爬多樣性

ECF: Citizen Science Programme - Conserving Herpetofauna Diversity through Raising Awareness of Invasive Species

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[聯絡我們](#)

[調查員登入](#)



如何提交簡報：使用 HKHerpPortal

密碼：[hkherpscientist](#)

Guest Area

Please enter the password below.

Password

●●●●●●●●●●

Go



如何提交簡報：使用 HKHerpPortal



環保基金：公民科學家計劃 - 由認識入侵物種到保育兩爬多樣性

ECF: Citizen Science Programme - Conserving Herpetofauna Diversity through Raising Awareness of Invasive Species



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簡介會教材



小組研習簡報
5月2日前提交



劉博士講座內容



小組研習指引

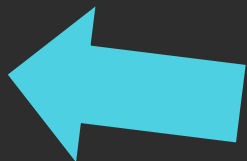
講座(二) | 認識入侵種及本計劃研究

2019年5月3日 晚上7時15分
錫安社會服務處

課堂教材 / 功課



視覺資訊圖表
5月31日前提交



野外考察(一) | 認識調查地點的生態

2019年5月25日 晚上6時30分
地點待定

課堂教材 / 功課

稍後發放



如何提交簡報：使用 HKHerpPortal

[小組研習] 簡報提交

The name and photo associated with your Google account will be recorded when you upload files and submit this form. Not kestrell@connect.hku.hk? [Switch account](#)

* Required

組別 *

- 第一組
- 第二組
- 第三組

小組研習題目 *

Your answer

簡報上傳 *

請提交PDF檔。

ADD FILE

SUBMIT





2019年5月25日

(後備日：2019年6月2日)

18:00-22:00

野外考察 (一) | 大潭 認識調查地點的生態





2019年5月31日

19:00-22:00

青年會專業書院地下禮堂2

講座(三)

南中國的兩爬保育

楊劍煥先生





2019年6月1日
(後備日：2019年6月9日)
18:00-22:00

野外考察 (二) | 東涌 認識調查地點的生態



意見調查



<https://forms.gle/i8ncgM24RXEAaPpWA>

