Point of Interest

	Science
Name	

Students use scientific equipment to test waterbodies and use that information to help them make conclusions about the quality of the environment.

You will:

- ☐ Use the DRO facility app to locate points of interest (POI's) within the DRO site.
- ☐ record observations accurately
- ☐ be able to describe POI's using accurate terminology.
- ☐ use accepted formats and conventions when presenting information and data (graphs, tables, diagrams)

DAINTREE RESEARCH OBSERVATORY - JCU

For this assessment task your will be investigating how humans might impact the delicate Daintree rainforest ecosystems. You will be conducting this study at the Daintree Research Observatory, which is run by James Cook University.

Location

The Daintree Rainforest Observatory is located at 40 m elevation in lowland tropical rainforest at Cape Tribulation, 140 kilometres north of Cairns in Queensland Australia (16º 06' 14.8" S, 145º 26' 58.0" E). The site is adjacent to the Daintree National Park. The Daintree rainforest has the highest biodiversity anywhere in Australia and has a unique Gondwanan flora.

In 1988 the rainforests among which the crane is situated were declared the Wet Tropics World Heritage Area. This is one of the few areas in the world where the reef meets the rainforest and the only place where two World Heritage Areas sit side by side. The site is flanked to the west by coastal ranges rising to more than 1400m and by the Coral Sea to the east.

Climate

Annual average rainfall is approximately 3500mm and is strongly seasonal with 70% falling during the wet season which runs from December to April.Summers are often hot and humid with the mean daily temperature in January around 28°C. However, temperatures up to 36°C are not unusual during the summer months. Winters are mild and dry with the mean daily temperature in July around 22°C.

Northern Australia is subject to tropical cyclones in the wet season and their occurrence is unpredictable. The impact of these severe tropical storm systems are regarded as a natural phenomenon and a key evolutionary factor in shaping the ecology of Queensland's tropical lowland rainforests.

History

The area in which this site is located was selectively logged in the late 1950's and early 1960's. There are however standing specimens of Toona ciliata (Red Cedar) in the area, which suggests that this logging was probably not intensive.

Extreme disturbance due to storm damage (tropical cyclones) is common in the area on a cycle of approximately 50 years. On the 11th of February 1999, tropical cyclone Rona (category 3) passed over the Cape Tribulation area causing widespread major damage. Wind gusts of up to 170 km/hr, local flooding and storm surges of up to 1.4m were recorded in the area. The canopy crane site was severely damaged, as approximately 10% of the trees were felled and 50% of the trees suffered complete crown loss on the research plot. The past 10 years has shown profound recovery of the forest.

http://www.jcu.edu.au/canopycrane/about/JCUPRD_046915.html

Section 1. Introduction

The Daintree Rainforest Observatory includes many points of interest. You will be locating a number of these POI's and accurately describing and drawing them.

5 POI's have been marked with a tracker. The DRO app will help you locate these POI's.

Equipment for each person:

- ☐ DRO facility APP
- ☐ Work sheet
- ☐ Pen and Lead Pencil for diagrams
- ☐ Clipboard or firm surface to support writing and drawing
- ☐ Hat and sunscreen
- ☐ Sturdy walking shoes
- ☐ Water bottle

Section 2. Procedure

1. Using the DRO app locate the first POI.
2. Accurately describe the POI. Include location and any other relevant observations. List important characteristics and features of this POI.
3. Draw a diagram of one part of the POI.
   Hint:
   1. Use a sharp lead pencil.
   2. Write a heading at the top of the box. Underline it.
   3. Draw a simple, side-on view of the POI (i.e. animal/plant -the focus of your diagram). Include only the essential details, no extra shading or colouring.
   4. Label the diagram. Print all labels. Write them horizontally to the diagram and close to the relevant feature. Arrange them neatly around the drawing. Rule a straight line (no arrowheads) between the label and the feature.
   5. Rule all straight lines, including underlining headings and titles. Do **not** underline labels!
4. Locate the next POI using the DRO app and repeat steps 1-4.

Section 3. Points of Interest

Point of Interest 1.

Describe the point of interest

Point of Interest 2.

Describe the point of interest

Point of Interest 3.

Describe the point of interest

Point of Interest 4.

Describe the point of interest

Point of Interest 5.

Describe the point of interest

Section 4. Conclusion

Write one paragraph summarising your observations.