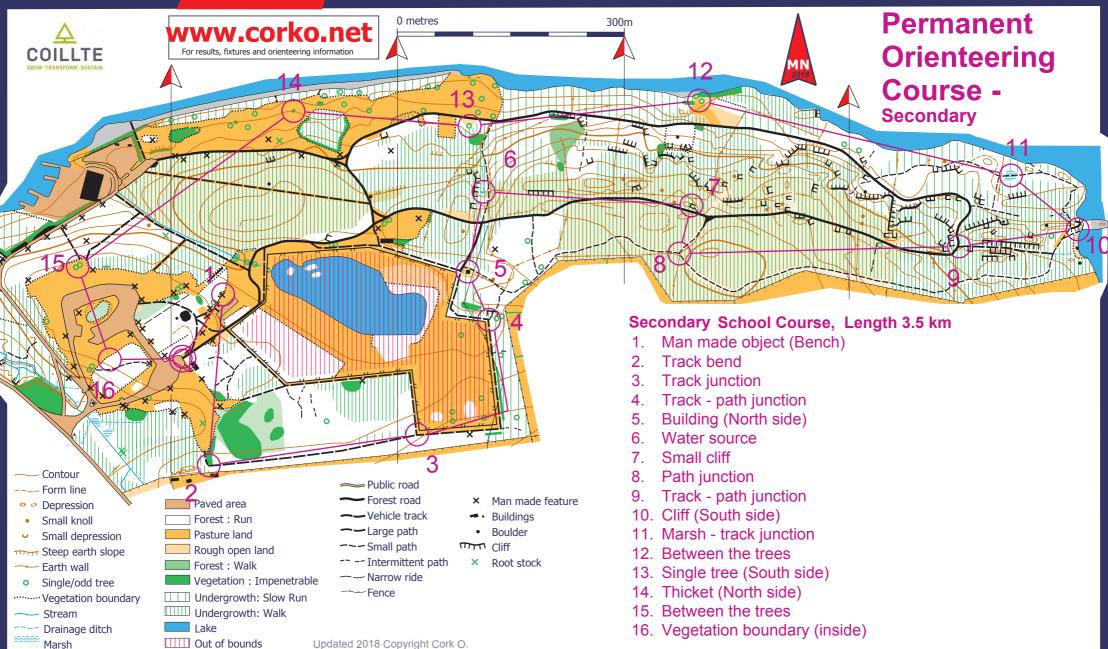


Farran Forest park

Scale 1:5,000 Contours 5m



Orienteering – Secondary School Level Farran Forest Park

Name		
Today's Date		

There are 16 controls for you to find on this Adventure Challenge. Answer the questions in this workbook in addition to listing the code at each control point. Answers without control codes do not get scored.





Control Point 1– The Squirrel

There is a healthy population of red squirrels in the park. One of these red squirrels stashed 310 hazel nuts away for the Winter however a non-native Grey squirrel found the stash and ate 50% of the nuts. Then a wood mouse came along and ate another 50 nuts. Eventually the Red squirrel visited his stash and ate a further 100 nuts before feeling quite ill. How many nuts were left to germinate and grow into trees?





Control Point Code:

Control Point 2– Leave No Trace



Have you heard of the Seven Principles of Leave No Trace? They are listed below; think of a reason for each principle that shows why it is important to practice Leave No Trace

Control Point 3 - Ecology We are going to examine a square metre of the forest habitat he study area off the path and measure it with a quadrat if you have a large step (about a metre square) if you don't. The square belo your chosen 1m² study area. Draw a simple sketch map of your a direction, scale, vegetation, stumps, animal traces etc. If there interest outside your study area, such as paths or streams, incluyour sketch also.	e one, or just w represents rea including are items of
]
Control Point Code:	

Control Point 4 – Unusual Tree Species

There is an unusual species of tree a couple of metres from this control point. It is very tall and has a peculiar bark that is not common to Ireland. Can you locate this tree and identify it. You can crush some of its leaves, if you can reach them, in the palms of your hands and smell the residue.

- a) What is the name of this tree?
- b) What country is it most commonly associated with?
- c) What animal's diet depends on the leaves of these trees?



Control Point 5 - The Hunting Lodge and Flighting Pond



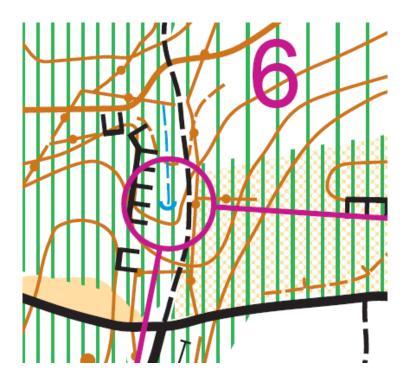
The hunting lodge, which is located close to this post, was used back in the day when the park was part of the Farran Demesne - the estate of Captain Clarke. The men of the hunting party would retire here to rest and discuss their quarry (or lack off), drink tea and socialise.

List 3 animals that the hunting parties may have pursued here as game.

- 1.
- 2.
- 3

Control Point Code:

Control Point 6 - Map Reading
Part of the skills required for Orienteering is map reading. There are a combination of symbols at Control Point 6, can you identify 3 of them?



1			
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Control Point 7 - Bats

Did you know that there are ten species of bat in Ireland? Six species have been recorded in this park alone; Leisler's, Common pipistrelle, Soprano pipistrelle, Daubenton and Natterers. These often misunderstood mammals are very intelligent, long-lived creatures. Although many die in their first year and the average lifespan in the wild is four years, some will live up to 40 years and beyond. All the Irish species give birth to only one offspring. It is also worth noting that a tiny pipistrelle can catch up to 3,500 midges per night!

How many pipistrelles would it take to catch 77,000 midges in one night?

Answer:	
$\boldsymbol{\pi}$	



Leisler's Bat © Phil Richardson

Control Point Code:	
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Control Point 8 – Forest Layers

There are four main forest layers, can you identify them in the woodland around you?

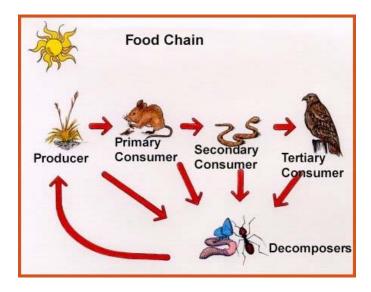
Canopy The highest layer, formed by the leaves and branches of the highest trees		THE STATE OF THE S
Shrub Up to 2 metres high, formed by larger		CAN CAN
woody plants, small trees, brambles and flowering bushes	E	EEEE N. 1250
Field		was the server
Tender or annual plants, ferns and herbs		
Ground	12	
Mosses and creeping plants		

Identify two plants in each layer in the forest around you:

Canopy	1.	2.
Shrub	1.	2.
Field	1.	2.
Ground	1.	2.

Control Point Code:

Control Point 9 – Food Chains



All the energy in the woodland originates from the sun. Green plants use photosynthesis to turn this energy into leaves and branches that are eaten by herbivores. These, in turn, are eaten by carnivores. Draw two food chains using the animals and plants that you have seen evidence of today.

Sun	→	Plant	\rightarrow	Herbivore	\rightarrow	Carnivore
Sun	\rightarrow		\rightarrow		\rightarrow	
Sun	→		→		→	

Control Point 10 - Mallard Cove

Mallard Cove is where the rise and fall of the waters of the Inniscarra Reservoir are most evident. If you look out onto the water you will see a Sally (*Salix atrocinerea*) bush that sits on a rock outcrop about 5 metres from the shore. Dependent on the time of year sometimes you can walk out to this sally tree, and on other occasions during the year all that is visible are a number of the upper branches.

Sit quietly for 5 minutes and list 5 <u>sounds from nature</u> that you can hear around you.

- 2. _____
- 3. _____
- 4. _____
 - 5. _____



Control Point 11 - The Marsh

The ground at this Control Point can get quite wet at certain times of the year. If a bag of deer nuts weighing 100KG were to sink at a rate of 10cm per minute into the marsh how long would it take before it would sink to a metre in depth?

Answer: _____



Control Point 12 – Directions

This exercise is to be carried out whilst stationary at the control point.

Facing due north, list the Control Points that are in the following directions.

1. 68 degrees East North East ______

2. 158 degrees South South East ______

3. 293 degrees West North West _____



Control Point 13 - Specimen Tree

This large tree stands out on its own from the planted forest and is a **Corsican pine** (*Pinus nigra maritima*). This species is native to Southern Italy, Corsica and Sicily, and is distinguished by long needles in pairs which are usually twisted



There are several other species of tree in Farran Forest Park, can you identify five of them on your way around this Orienteering Challenge?

1				

Control Point 14 – Renewable Energy

This control point lies beside Inniscarra Lake on the River Lee. The river rises in the hills close to Coillte Forest Park Guagán Barra and travels 65km due east to Cork City. Reservoirs were developed here and 14km away at Carrigadrohid between 1953 and 1957 to supply water to the ESB hydro-electric power stations further downstream. The energy generated from a natural resource that is naturally replenished may be termed **Renewable energy**.



Name 3 other types of renewable energy

1.	 	
2		
۷.		
3.		

Control Point 15 - Climate Change

In recent years, the world has experienced extreme weather conditions such as unprecedented storms, catastrophic wildfires and record breaking temperatures. We have also become more aware of the amount of plastics in our oceans and the negative impacts that is having on our biodiversity, along with habitat loss of terrestrial space.

Solutions do exist.



List 5 'habit' changes that each individual can undertake that combined can help address climate change.

1.	
2.	
3.	
4.	
5.	

Control Point 16 - Crossword

		1				2		3		
	4									
	5						6			
					7					
				8				9		
			10							
	11									12
									13	
				14			15			
16					17					
18										

Across

- 1. Farran Forest park is located on the shores of which lake? (10)
- 5. A semi-aquatic mammal that lives on river banks and lake shores and feeds on fish and shell fish. (5)
- 6. A nocturnal bird. (3)
- 7. A species of tree that suffered from a Dutch disease a number of years ago.(3)
- 9. An amphibian. (4)
- 11. A woodland animal of which there are Red and Grey in Ireland. (8)
- 13. Home of the fox. (3)
- 14. Trees produce this gas that is vital for life. (6)
- 16. A girl's name but also the name of an native Irish woodland tree. (5)
- 17. Family name of previous owners of the Farran estate. (6)
- 18. The process by which plants make food and produce oxygen using light energy trapped by chlorophyll is called? (14)

Down

- 2. What is the name of the company who manage Farran Forest Park? (7)
- 3. What is the sport associated with the Centre that is built within the park?(6)
- 4. What piece of equipment does an orienteer use to navigate or tell what direction they're going in? (7)
- 8. This element is stored in plants and soil in the forest. (6)
- 10. A male fallow deer. (4)
- 12. Small creatures that can be found on the forest floor. (7)
- 15. What trees are planted into, also a planet. (5)
- 16. The fruit of the wild rose or dog rose is what? (3)

Control	Point	Code.		
	голи			

Question	Ai	Control Code	Total	
Q 1	The Squirrel	5	HL4	
Q 2	Leave No Trace		G4E	15
Q 3	Ecology		LOL	15
Q 4	Unusual Tree Species	Eucalyptus Australia Koala Bear	N56	15
Q 5	The Hunting Lodge and 'Flighting' Pond	Eg. Deer, Ducks, Guinea Fowl, Pheasants, Rabbit	43E	15
Q 6	Map Reading	Eg. small depression, drainage ditch, small path, undergrowth, passable rock face or crag, contours, earthwall	X65	15
Q 7	Bats	22	72V	15
Q 8	Forest Layers		D41	— <u>15</u> — <u>15</u>
Q 9	Food Chains		JP4	
Q 10	Mallard Cove		S4Z	15
Q 11	The Marsh	1 hour 40 mins	X09	15
Q 12	Directions	Control point 12 Control point 6 Control point 14	39M	15 ————————————————————————————————————
Q13	Specimen Tree	,	N66	15
Q 14	Renewable Energy	Eg. Wind, Wave, Solar, Geothermal, Biomass,	Т9Т	15
Q 15	Climate Change		67Y	15
Q 16	Crossword	Across Down 1. Inniscarra 2. Coillte 5. Otter 3. Rowing 6. Owl 4. Compass 7. Elm 8. Carbon 9. Newt	W1D	15

Secondary Answer Sheet

	12. Insects 13. Den 15. Earth 14. Oxygen 16. Hip 16. Holly 17. Clarke 18. Photosyn	thesis	
Total	Te. Thotesyn	225	