**Climate Literacy & Action**

**through DofE Expeditions 2020 and Beyond**

The purpose of this paper is to inform all EAC DofE Award Centres, co-ordinators, leaders and supervisors of the background context and additional requirements from 2020 of the Expedition section at all levels.

“In April 2019, the First Minister declared a global climate emergency. This announcement acknowledges the urgent challenge we face to reduce our greenhouse gas emissions and adapt to the changing climate. The United Nations states that humans have caused one degree Celsius of warming to the Earth’s atmosphere over the past century and 1.5°C of warming could come as soon as 2030. Scotland’s climate has already changed:

* Scotland’s 10 warmest years on record have all been since 1997.
* Rainfall levels have increased in Scotland since the early 1960s, by around 27%.
* Sea level rose by 8cm between 1900 and 1990, and likely to rise by a similar amount by 2030.

We expect these changes to continue and intensify. Without strong worldwide action to cut harmful greenhouse gas emissions, we can expect further serious negative impacts, globally and in Scotland. These include threats to food and water supplies, health, biodiversity and ecosystems, transport, businesses, public services and Scotland’s iconic historic environment.

Scotland’s Climate Change Bill sets emission reduction targets of 70% and 90%, by 2030 and 2040 respectively, and net-zero emissions by 2045. This means that Scotland’s contribution to climate change will end, definitively, within a generation. The Scottish Government want to ensure that everyone in Scotland is informed, prepared, and ready to adapt to the changing climate. To make informed decisions on how to adapt to climate change, people need to understand climate change and its impacts. This is referred to as climate literacy.

Our natural environment is facing threats from a range of environmental drivers, including climate change, invasive non-native species, novel pests and diseases, over-exploitation, and pollution. People derive a wide range of benefits from the natural environment. Ecosystem services are the direct and indirect contributions of ecosystems to human wellbeing. Ecosystem services are vital to society, the economy and the functioning of our natural systems. Helping nature to adapt will in turn provide us with benefits such as clean water, flood risk management, biodiversity, carbon storage, erosion control, pollination, climate regulation, natural resources, environmental assets, mental and physical health and well-being, recreation, tourism, aesthetic values, spiritual values, cultural heritage and sense of place. We are more likely to care for nature if we have a good understanding of its value. More than just understanding the value of nature, it is also important that we understand our connection to it. As humans, we are also part of ecosystems. We are not separate from nature but part of it. Related to this, it is important that we also recognise the intrinsic value of nature.” *CLIMATE READY SCOTLAND: Second Scottish Climate Change Adaptation Programme 2019-2024 Scottish Government*

The [Vision 2030+](https://education.gov.scot/improvement/Documents/res1-vision-2030.pdf) report sets out Scotland’s vision for LfS in educational settings through to 2030. It builds on the five strategic recommendations in the [Learning for Sustainability report](http://www.gov.scot/resource/0041/00416172.docx) which were accepted by Ministers in 2013: Number one being “All learners should have an entitlement to learning for sustainability.”

Duke of Edinburgh Award Expeditions are exceptional personal and social development opportunities, and undoubtedly challenge and develop the resilience of all participants. In common all pass through rural, sometimes wild countryside which forces participants to get closer to nature. In response to the climate emergency, the threat to nature and the entitlement to learn for sustainability, East Ayrshire Council Educational Service DofE Award centres will maximise the Climate Literacy and Climate Action potential of these experiences.

**Every expedition from 2020 and beyond** will fulfil the 4 basic requirements and optionally the progression activity.

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|  | Basic requirements | Progression activity |
| 1 | Provide participants climate impact info sheet appended. | Establish gear reuse scheme/store |
| 2 | Report expedition transport mileage | Calculate carbon footprint |
| 3 | Collect plastic litter on route #TakitHame | Report environmental damage found to land manager |
| 4 | Have an Environmental Aim | Participate in John Muir Award |

**Basic Requirements Carbon Literacy & Action**

***1 Climate impact info sheet***

Reduced use of plastic, especially single use on expedition

Get participants to look critically at the amount of packaging they take on expedition with them.

Look critically at gear purchasing

All equipment purchases have a carbon footprint. Can participants reduce this by more responsible purchasing? Ensuring that they really need the product, will it last a significant length of time. Can schools establish/expand a supply of kit that could be shared rather than everyone buying kit that might only be used once or twice?

***2 Expedition transport mileage***

Carbon offsetting of transport emissions.

Each school will estimate the number of miles travelled by cars, minibuses or coaches during the expedition season and send their estimate to Peter Stewart, LOST team.

EAC will then organise planting trees to offset the carbon footprint of our expeditions.

Groups can also use <https://www.myclimate.org> to calculate their own individual expedition carbon footprint.

***3 Collect plastic litter***

Leave No Trace

Ensure that all expeditions are aware of their responsibility to ensure that camp sites and the areas they walk through are left as they found them. Including issues such as taking litter home, toileting and fires. Not only leave no trace but clear up other litter. Every group will take part in the MCofS “Tak it Hame” campaign. Each group will be supplied with a “Tak it Hame” bag, collect litter during the expedition, then tweet results.

***4 Environmental Aim***

Aims will focus groups’ attention on the quality of nature they are passing through and the challenges present. This can be developed by incorporating the John Muir Award into the expedition planning.

**The John Muir Award**

The John Muir Award is an environmental award scheme focused on wild places. It helps people connect with, enjoy, and care for wild places. It's non-competitive, inclusive and accessible. It has 4 stages; Discover, Explore, Conserve and Share.

For more details see these links [introduction](https://www.johnmuirtrust.org/john-muir-award/john-muir-award-introduction), [Introductory Video](https://www.youtube.com/watch?v=jCulXPYPP4U), [JMA and the DofE Award](http://enigma.east-ayrshire.gov.uk:32224/?dmVyPTEuMDAxJiY4OGQ1ZGE5OTc3YWE5MTViMT01RTU3QTZEMV8xODUzM18xMjQxOV8xJiY4NjcyMzgzMWE3ZDUzZmU9MTIyMiYmdXJsPWh0dHBzJTNBJTJGJTJGd3d3JTJFam9obm11aXJ0cnVzdCUyRW9yZyUyRmFzc2V0cyUyRjAwMCUyRjAwMSUyRjExOCUyRlRoZURvZkVBd2FyZEFuZEpvaG5NdWlyQXdhcmQlNUZ1cGRhdGVkJTVGb3JpZ2luYWwlMkVwZGYlM0YxNTI4NzI4ODM4)

Lorna Sloan EAC JMA Officer, will be able to support schools introducing the Award to their groups and show how to achieve the award during the planning and execution of their expeditions.

**JMA Discover & Explore nature DofE examples**

More focussed aims whilst traveling through countryside

Encourage groups to have aims that focus on the environment they are passing through. Could include;

* plant / tree/ animal surveys; Citizen Science
* Artworks produced from litter collected,
* Recording aspects of the environment by drawing/photography,
* Write a series of poems of your experiences and critique them.
* Create a nature guide of your route for future participants on expedition.
* Look at and take notes of the weather forecast before you go and keep a log of how the weather you experience differs. Did the forecasters get it right? Investigate several folklore ways of forecasting e.g. red sky at night, hanging seaweed, cows lying down etc. and test them out to see if they work.
* Collect samples of rocks / stones on the way from different environments. Identify them, explain where they came from and why they are the shape they are.

**JMA Conserve nature DofE examples**

Litter Collection

Not only leave no trace but clear up other litter. Every group will take part in the MCofS “Tak it Hame” campaign. Each group will be supplied with a “Tak it Hame” bag, collect litter during the expedition, then tweet results.

Reporting problems

Encourage groups to look critically at paths, fences and gates and record, then report any problems they encounter to the appropriate authority.

**JMA Share nature DofE examples**

The groups will share their experiences with others through a presentation, assessor debrief or a Citizen Science Upload.

These actions all relate to the Expedition Section of the Duke of Edinburgh’s Award but we will putting together proposals as to how participants can extend these actions into other sections of their Award.