

Farming for a Better Climate



Nether Aden



Name	David and Nicola Barron
Farm	Nether Aden
Locality	Aberdeenshire
Farm type	Mixed
Size	210 Hectares

David and Nicola Barron run Nether Aden, a mixed farm on the outskirts of Mintlaw in Aberdeenshire. The farm covers 210 hectares where David maintains a herd of 110 suckler cows, finishing all the progeny.

Crops at Nether Aden include spring and winter barley, whole crop, winter wheat, winter oilseed rape plus grazing and silage.

David and Nicola have volunteered to work with SRUC as a *Climate Change Focus Farm*. Over the three year initiative, David and Nicola will look at practical measures to further improve farm efficiency and reduce the carbon footprint at Nether Aden.

How might climate change affect Nether Aden?

Like all farms, Nether Aden has seen farm input prices rise over the years; the cost of fuel, fertiliser, and feedstuffs plus many other commodities continue to increase. The wider global impact of climate change both on input costs and agricultural production systems could see costs increase further with additional levies being placed on certain inputs.

David and Nicola view reducing carbon emissions as another approach to improving farm efficiency, leading to better physical and financial performance for the business.

How can you benefit from activities at Nether Aden?

Reducing the farm carbon footprint can save you money. Working with a discussion group, David and Nicola are running a series of farm meetings looking at practical ways to improve production. Meetings are free to attend and all farmers are welcome. For more information, practical ideas to improve efficiency and profiles of the farms taking part in the project, visit the website, email climatechange@sac.co.uk, follow us on Twitter [@SACFarm4Climate](https://twitter.com/SACFarm4Climate) or find Farming for a Better Climate on Facebook.

Case Study

Find out what other farmers are doing to improve profitability and adapt to a changing climate in our series of case studies.

There are five sets of Practical Guides covering :

Use energy and fuels efficiently

Develop renewable energy

Lock carbon into soils and vegetation

Optimise the application of fertilisers and manures

Optimise livestock management and the storage of manure and slurry

Find further information, including links to other Practical Guides and Case Studies, at



www.farmingforabetterclimate.org

Funded by the Scottish Government as part of their Climate Change Advisory Activity

Websites

www.farmingforabetterclimate.org

www.agrecalc.com

Nether Aden Farm Case Study

Benefitting from farm woodlands

Trees and hedges are one way to 'lock up' carbon on the farm.

David said *"we already have a number of trees within hedges acting as shelterbelts for livestock, but would be open to more planting in the right place, especially as this could provide a future fuel supply for the biomass boiler and grain dryer"*.

It's been shown that providing additional shelter for livestock from hedge or tree planting can improve feed conversion rate, weight gain and benefit animal health; in turn this could also help to reduce the farm carbon footprint.



Renewables

David and Nicola have recently installed a 200kW ETA Hack biomass boiler and grain dryer unit which supplies the farm with an efficient way to dry grain and generates extra income via Renewable Heat Incentive (RHI) payments. Other renewables at Nether Aden include a 10 kW solar Photovoltaic (PV) panel array. David said *"our experience to date with renewables has been a positive one, so we are looking at other systems we can consider at Nether Aden to continue to reduce our fuel bills"*



Nutrient use

Manure produced on the farm is used as a valuable source of nutrients for the crop enterprises, together with purchased compound and nitrogen fertilisers.

David said *"Using precision farming techniques could help us to better target nutrients, even-out soil pH within individual fields and maximise crop yields; we will be looking at which nutrient application and management options are most suitable for us at Nether Aden. Aside from the financial aspect we also need to be careful when applying fertilisers or manures as we are both in an NVZ and within the Ugie catchment"*.

Livestock efficiency

Strategies to improve livestock efficiencies at Nether Aden include targeting the health status of the suckler cows, improving calf health and maximising calf performance.

Improving and safeguarding overall herd health will help to reduce losses and maximise profitability from the cattle enterprise.

During the project, different management systems will be investigated to ascertain the best physical output and financial return for the farm.

Grassland Management

Grassland production and improvement of both the performance and utilisation of the grass leys on the farm is a key component to maximise the cattle performance, whilst minimising the requirements for purchased feeds.

Getting the most from the grass and home produced fodder, while financially advantageous, will also have benefits in terms of the carbon efficiency under the current system through reduced purchase of feeds.