# BCM Environmental Services Limited

Project updates – December 2017

#### Castle Stuart Golf Links

Providing environmental support regarding the development of a second 18 hole course

From November 2015 onwards (with interludes) BCM Environmental Services Limited has once again been engaged by Castle Stuart Golf Links to facilitate the creation of a second 18-hole Championship course at Castle Stuart (having been engaged as an ornithological consultant and then as an environmental management consultant on the first project during the previous decade).

This course, which was previously called the Lonnie Golf Course, and is now entitled the Tribute Golf Course, was originally granted planning approval at the same time as that for the existing Castle Stuart Golf Course, which was completed in 2009. The Castle Stuart Golf Course is a links course, but importantly, was created within an area which was previously farmland, using the extensive sandy deposits which existing beneath the site to create sand-dunes. Nonetheless, the development necessitated high levels of environmental management, as the site is immediately adjacent to the highly designated Moray Firth. Within a few years of completion the Castle Stuart course was one of the highest rated golf courses in the world (for example, when it first opened, Golf Magazine immediately named it top new international course and placed it at number 56 in the world). The creation of the new course will involve a similar process on a nearby site (also currently farmland and again immediately adjacent to the Moray Firth).

Between November 2015 and March 2016 BCM Environmental Services Limited was involved with preparing all of the Environmental Impact Assessment documentation supporting the planning application, as well as facilitating the planning process, and providing additional supporting information to accompany the planning application for the new course, etc.

Specifically this involved managing the required environmental input to the proposed course, etc., preparing two ornithological impact assessments, reviewing and commenting on the various specialist reports prepared by Highland Archaeological Services, M and R Ecology, Horner and Maclennan Landscape Architects and Fairhursts and converting these into the various Technical Appendices, and preparing the Environmental Statement Main Report and Appendices and Non-technical Summary on the basis of the same.

In more detail this also entailed attending meetings with the planning consultants in Edinburgh, attending meetings at Castle Stuart, liaising with key consultees, project colleagues and with other consultants as required, preparing both a draft Construction Environmental Management Plan and a draft Construction Method Statement for the Creation of the Tribute Golf Course, liaising with the archaeological consultants regarding the preparation of a method statement describing investigating and protecting archaeology, and reviewing and commenting on the same, etc., liaising with SEPA, et al., and Fairhurst's, et al., regarding the preparation of drawings describing / illustrating creating an irrigation reservoir, and diverting and re-modelling Lonnie Burn, etc., liaising with SNH et al., and the client regarding the preparation of a drawing describing / illustrating protecting roosting waders (i.e., creating a bund) and providing wording describing the same, liaising with the architects and the client regarding the preparation of a drawing describing / illustrating sourcing and / or importing sand and providing wording describing the same, preparing the draft (Recreational) Access Management Plan, liaising with the architects and the client regarding the preparation of the (Recreational) Access Management Plan Diagram, liaising with the client regarding the preparation of the Tree Survey / Arboricultural Impact Assessment, and reviewing and commenting on the same, etc., and undertaking miscellaneous related tasks including liaising with officers of statutory bodies, project team members, resolving issues like requirements for details of temporary and permanent watercourse crossings, etc.

Planning approval was subsequently awarded for the Tribute Golf Course in July 2016. From September 2017 onwards BCM Environmental Services Limited commenced expediting the planning conditions which applied to the planning approval. Initially, this involved completing the Construction Environmental Management Plan package in conjunction with Castle Stuart Golf Links and in consultation with The Highland Council, SEPA and SNH. Subsequently it will involve preparing other such documentation (e.g., the (Recreational) Access Management Plan) and providing an Environmental Clerk of Works throughout construction which is scheduled to conclude with a 'soft opening' of the new course in summer 2020.



An aerial image of the Castle Stuart course taken in November 2012, showing the juxtaposition of the course and the Moray Firth.



A meeting with consultees from the statutory bodies at the Castle Stuart Golf Resort



The Environmental Statement (Main Report) for the Tribute course prepared by BCM Environmental Services Limited.



Castle Stuart itself, with the art deco style Castle Stuart Golf Links clubhouse in the background.



An image of an early conceptual design for the Tribute course.

#### Scottish Natural Heritage

Conducting site condition monitoring of taiga bean geese

Between October 2015 and March 2016 BCM Environmental Services Limited again completed a monitoring programme for taiga bean geese on the Slamannan Plateau and reported on the same.

This work was undertaken on behalf of Scottish Natural Heritage (SNH) and was the sixth consecutive wintering period during which such monitoring and reporting was carried out.

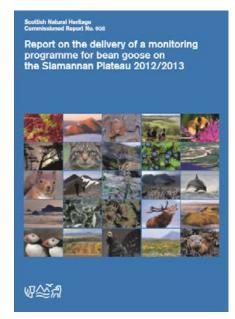
Specifically, the work involved undertaking five monthly roost counts and one ageing assessment of the Slamannan Plateau wintering population of taiga bean geese and providing a detailed report re the same, etc., (to serve the site condition monitoring obligations of SNH in relation to the Slamannan Plateau Special Protection Area).

This report (and the others in the same series) was then published by SNH as a Commissioned Report, an example of which is illustrated here.

In addition to this monitoring, in conjunction with two Wildfowl and Wetlands Trust research officers and the Bean Goose Action Group (BGAG) monitoring officer, BCM Environmental Services Limited has also conducted other consultancy work on the Slamannan Plateau wintering population of taiga bean geese. For example, the consultancy was awarded a contract by SNH to characterise the fields used by the geese / those fields, etc., within what is termed the Bean Goose Study Area and create a database of the same (and carrying out initial analyses of the same), to create a data-base containing all BGAG monitoring data and location data available from telemetry, (and carrying out some simple analyses of the same), and to create a website to provide information on 'Scotland's Bean Geese'.

BCM Environmental Services Limited has also, in various instances, completed both desktop study and survey work for developers wanting to site single wind-turbines or wind-turbine arrays within the Bean Goose Study Area. This work has involved using existing monitoring data, location data available from telemetry and data derived from survey work specifically carried out on behalf of the developers involved to appraise the decision making process, either for the developer, or for the planners, or both.

Finally, besides being professionally involved with the taiga bean geese associated with the Slamannan Plateau, Brian Minshull is also involved with ongoing BGAG monitoring and capturing and marking studies on a voluntary basis.



An example of one of the SNH Commissioned Reports prepared by BCM Environmental Services Limited



Brian Minshull with a taiga bean goose during the catching and marking undertaken in October 2012.

#### **Private client**

Providing environmental support relating to restoring a site

Between April and May 2016 BCM Environmental Services Limited provided ecological and ornithological advice to a private developer regarding the ecological options and implications of the re-development and reinstatement of a former opencast site at Darnrig Moss on the Slamannan Plateau.

This involved preparing a report proposing measures to mitigate environmental impacts and ornithological effects of the proposed housing development and to enhance the wider site for wildlife (and in particular for roosting taiga bean geese) in relation to the largely un-reinstated Darnrig Moss opencast site.



An aerial image of site involved.



The un-reinstated nature of part of the site, and the largest of the water-bodies within it (a flooded open-cast excavation) which is now used as a roost site by taiga bean geese.

# University of Edinburgh

Providing ornithological support regarding the development of the new Innovation Centre and Campus Hub at Easter Bush Campus

Between November 2015 and June 2016 BCM Environmental Services Limited again provided the University of Edinburgh with ornithological guidance in relation to the construction of the Innovation Centre and Campus Hub at Easter Bush Campus of the University of Edinburgh, as it had done during the 2015 breeding season.

Then, the start of construction of the prestigious new development had been delayed as a pair of oystercatchers had nested on the crushed building rubble that comprised the substrate of the site once the previous building there had been demolished. As the new building was a multimillion pound development this delay was very costly, and therefore the University and the Project Team were very keen to avoid any such delays in the 2016 breeding season.

This involved providing advice to the University Site Managers and to the Project, specifically in relation to the various pairs of oystercatcher breeding on the campus and proposing and overseeing mitigation measures.



A computer generated image of the completed Innovation Centre and Campus Hub at Easter Bush Campus.



An oystercatcher nest amongst gravel placed on an adjacent flat roof to create suitable nesting habitat away from the development site.



Another similar mitigation measure which was deployed in 2016; an area of adjacent wet horse paddock was fenced off and turned into a pseudo-beach by spreading pebbles over it, again in an attempt to provide suitable breeding habitat away from the development site itself.

#### **AMEC Foster Wheeler**

Acting as an ECoW on a Scottish Gas Networks gas pipeline project

Between June and September 2016 Brian Minshull of BCM Environmental Services Limited was contracted as an Environmental Adviser / Environmental Clerk of Works by AMEC Foster Wheeler on the Scottish Gas Networks Moray Reinforcement High PressureGas Pipeline Project near Insch, in Aberdeenshire. Thus, after an interlude of some eleven years, Brian Minshull once again worked ona 'live' oil and gas pipeline construction project, having almost solely done so for 13 or more years between 1987 and 2002.

AMEC Foster Wheeler had struggled to find an appropriate candidate for the role, and therefore construction had already commenced when Brian Minshull was appointed. Further, the contract had been poorly priced, and as such project management were keen to cut costs wherever possible. As such the role was part-time. Further, again, the project was poorly managed. For these reasons the role was less effective than it could have been.

The work involved providing environmental advice to AMEC Foster Wheeler and acting as the contractor's Environmental Clerk of Works on the Project.

Specifically these roles involved managing all environmental issues on the Project, reviewing and commenting on project documentation, preparing and / or revising a Construction Environmental Management Plan, a Waste Management Plan and a Water Management Plan, liaising with the client (Scottish Gas Networks), statutory bodies, local residents, etc., in relation to environmental management issues, addressing issues raised in environmental audits conducted by the client, devising and implementing silty water run-off mitigation measures, preparing and providing environmental tool-box talks, undertaking weekly or fortnightly environmental monitoring visits, preparing reinstatement schedules, etc.



Part of the Moray Reinforcement High Pressure Gas Pipeline route during construction.

#### **AMEC Foster Wheeler**

Acting as an ECoW on a Scottish and Southern Electricity Networks underground cables project

Between September 2016 and April 2017 Brian Minshull of BCM Environmental Services Limited was contracted as an Environmental Adviser / Environmental Clerk of Works by AMEC Foster Wheeler on the Scottish and Southern Electricity Networks Blackhillock to Keith 275kV Underground Cables Project near Keith, in Moray (this, in effect, being the 'sister' project of the nearby and preceding Moray Reinforcement High Pressure Gas Pipeline Project).

AMEC Foster Wheeler had delayed the start of this project until the nearby pipeline project had been largely completed, although again the right-of-way had been prepared long before Brian Minshull moved from one project to the other. Further, the contract again had been poorly priced, and as such project management were keen to cut costs wherever possible. As such the role was part-time. Further, the project was poorly managed. Brian Minshull were dispensed with long before construction and restoration were completed. For these reasons the role was less effective than it could have been.

The work involved providing environmental advice to AMEC Foster Wheeler and acting as the contractor's Environmental Clerk of Works on the Project. Specifically, these roles included managing all environmental issues on the Project, reviewing and commenting on project documentation, preparing a Construction Environmental Management Plan, Waste Management Plan and Water Management Plan, contributing to project induction package and occasionally giving inductions, liaising with the client (Scottish and Southern Electricity Networks), statutory bodies, local residents, etc., in relation to environmental management issues, addressing issues raised in environmental audits conducted by the client, devising and implementing silty water run-off mitigation measures, preparing and providing environmental tool-box talks, undertaking weekly or fortnightly environmental monitoring visits, etc.



Part of the Blackhillock to Keith 275kV Underground Cables route during construction.

# Southport Offshore Rescue Trust

Providing ecological support regarding the development of a new lifeboat station

From June 2016 onwards the consultancy has provided ecological guidance and advice to Southport Offshore Rescue Trust (which provides for offshore rescue on the Sefton Coast) regarding a project to create a new, modern, purpose-built Lifeboat Station in coastal / central Southport, North Merseyside.

In particular, this has involved providing advice on rationalising and implementing the ecological planning conditions (the first version of which, although well-intentioned, were poorly-considered and as such impractical) relating to the planning approval for the new development and preparing a Sand Lizard Mitigation Licence application.



An aerial image of site involved (highlighted in yellow).



A computer generated image of the completed lifeboat station.



An image of male Sand Lizard taken elsewhere on the Sefton Coast.

## The Wildlife Partnership

Participating in a bat emergence survey with The Wildlife Partnership in relation to the proposed re-development of the Chapel Farm steading buildings, by Aberdour, Fife.

Although this was paid consultancy work, it is also a good example of the types of additional activities Brian Minshull undertakes as part of his Continuing Development (CPD) and / or on a voluntary basis. Such work includes participating in long-term monitoring studies of breeding honey buzzards and wintering taiga bean geese, for example.



A brown long-eared Bat located during the bat emergence survey completed at a farm-steading near Aberdour, Fife.

# The Kerr Practice / Gamma Aviation

Preparing a Bird Hazard Management Plan.

Between June and August 2015 BCM Environmental Services Limited was engaged by The Kerr Practice / Gamma Aviation to prepare and provide a Bird Hazard Management Plan (for both the construction and operation phases) for a new hangar at Aberdeen Airport, including reviewing all documentation and drawings, liaising with various personnel at The Kerr Practice, Gamma Aviation and The Wildlife Partnership, and preparing a draft document and progressively finalising the same in relation to comments received, etc.

As with earlier Bird Hazard Management Plans produced by the consultancy, this document was prepared in accordance with various guidance documents, and in particular in compliance with the advice note prepared by the Civil Aviation authority and others regarding safeguarding of the aerodromes entitled 'Potential Bird Hazards from Amenity Landscaping and Building Design'.



A computer generated image of the new hangar at Aberdeen Airport.

### **Lomond Energy**

Undertaking ornithological surveys and preparing ornithological reports in relation to single wind-turbine applications.

Between June and August 2015 BCM Environmental Services Limited was engaged by Lomond Energy to prepare and provide Bird Assessment Reports for two separate single wind-turbine sites (Blairhill Farm and Balgownie Farm).

This entailed visiting the sites for a proposed single wind-turbines involved at sites near Culross, Fife, and conducting an appraisal of the known and likely bird community and providing a brief report re the same, etc.

(Note: Prior to this, in a further 10-20 instances, similar visits were completed and similar reports were provided regarding other proposed single wind-turbines, invariably for the same client).



A single wind-turbine now in operation at Cruivie in Fife. In this instance, (as in many others) BCM Environmental Services Limited also completed 36 hours of vantage point survey.

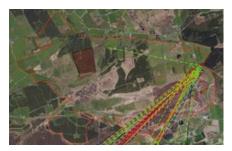
# **AMEC Wind Developments**

Providing ornithological advice and guidance, undertaking desk-top studies and ornithological surveys and preparing ornithological reports in relation to a wind-turbine cluster application.

BCM Environmental Services Limited provided specialist ornithological support to AMEC Wind Developments between February 2014 and March 2015 in relation to a proposed wind-turbine cluster. Initially, this involved providing ongoing advice regarding taiga bean geese in the vicinity of the proposed development site.

Subsequently it also involved completing a comprehensive review of existing data, embracing Bean Goose Action Group (BGAG) Reports, etc., other such reports from years pre-dating those of the BGAG work (including reports detailing work commissioned by SNH and completed by RSPB in winters 1993/1994 and 1994/1995 and reports detailing work completed on a voluntary basis in winters preceding those by an early worker on the geese, and finally the Central Region and Forth Bird Reports for the period 1987 to 1995) and sourcing and using mapping specifically prepared by the Wildfowl and Wetlands Trust ornithologists providing a representation of data, revealing actual patterns of field usage and nominal flight-lines, etc.

This ultimately resulted in the consultancy undertaking consultations with SNH and Falkirk Council regarding the proposed wind-turbine cluster on the basis of this desk-top study and preparing a detailed proposal for vantage point and autumnwinter walkover surveys regarding the same, etc. Finally, it also involved undertaking 106 hours of vantage point survey (configured at dawn, dusk and day proportionally) and four autumn-winter walkover surveys in relation to the proposed wind-turbine cluster, etc.



An aerial image depicting pseudo-flight-lines for taiga bean geese relative to the proposed development site, generated by using location data derived from telemetry.