

APPENDIX 1

SNH Response to ES

30.05.2007



Head of Development Management and Building Standards
Planning and Environmental Services
Aberdeenshire Council
45 Bridge Street
ELLON
AB41 9AA

30 May 2007

Your Ref: APP/2006/4605

For the attention of Lesley Aitken

Dear Sir/Madam

**OUTLINE PLANNING PERMISSION FOR GOLF COURSE AND RESORT
DEVELOPMENT
LAND AT MENIE HOUSE, BALMEDIE**

Thank you for consulting Scottish Natural Heritage (SNH) on the above application and for allowing SNH to have additional time to consider this proposed development and prepare this advice. This letter sets out SNH's advice in respect to the impacts that this development would, if approved, have on the natural heritage and comments on the content of the Environmental Statement submitted with the application. The detail of SNH's advice is contained in six appendices. Whilst we recognise that this is a lengthy document, we are aware that this is a very significant development and we hope that you find it helpful. SNH has already commented separately on an application for full planning permission for a golf maintenance building with service yard. We will be shortly forwarding to you our comments on the detailed application for the championship golf course.

THE PROPOSAL

The application is for outline planning permission to develop a golf resort and housing at Menie, Balmedie. The development is proposed on undeveloped coastal sand dunes, agricultural land and the policies of Menie House.

SNH ADVICE

Protected sites (Foveran Links Sites of Special Scientific Interest (SSSI)) and Biodiversity

This development, specifically the championship golf course and associated infrastructure, will have significant adverse impacts both to the coastal landform interest and the coastal vegetation within the Foveran Links SSSI and also to the sand dune habitats south of the SSSI. The Environmental Statement clearly states this. The vegetation types include

habitats listed within Annex 1 of the European Habitats and Species Directive. The construction of a golf course on this dune system will be contrary to the UK Coastal Sand Dunes Habitat Action Plan. SNH does not consider it possible to mitigate or compensate for the loss of this important habitat. **SNH therefore objects to the proposal to construct a championship golf course in its current location.** SNH can, however, see the potential to construct a single championship course on other adjacent land within the development site without causing significant impacts to this SSSI or sand dune habitats.

Species

Bats and otters, both European Protected Species (EPS), are present on the site. SNH advice is that further survey work is needed to demonstrate that there will be no adverse impact on EPS. Badgers present on the site are specifically protected under the Protection of Badgers Act 1992. SNH advises that further work is necessary to assess the impact of the proposal on badgers, to identify mitigation and licensing requirements.

Landscape and visual amenity

The proposed development would result in a significant loss of distinctive landscape character and quality that is recognised in the designations of Undeveloped Coast and an Area of Landscape Significance. An iterative and master planning approach to consider the capacity of the landscape to accommodate different scales of development has not been adopted. SNH's advice is that the design development process has been inadequate and that opportunities to reduce landscape and visual impacts have not been explored. An iterative landscape capacity assessment, and associated development design should be undertaken.

Housing

Housing on this scale in this location should be underpinned by a masterplan, which would identify infrastructure and facilities. A design statement should consider how the housing fits into the landscape and its relationship to the rest of the development. SNH's advice is that the natural heritage impacts of housing in this location cannot be assessed without further detailed information and a master planning approach. Master plans form part of the Urban Design Toolkit promoted by PAN 67, Housing Quality.

Access and recreation

SNH supports the proposal to produce an 'access strategy' for the proposed development in order to facilitate safe and responsible public access. SNH advises that further survey is required to identify the current level and types of visitor use. Increased recreational pressure to the Ythan estuary, Sands of Forvie and Meikle Loch Special Protection Area (SPA) may occur if this development is approved. This potential impact has not been addressed in the Environmental Statement. While these concerns do not form a basis to object to the development they may be significant in considering some of the detailed aspects, and any legal agreements, that form part of any consent.

SNH APPRAISAL OF THE PROPOSAL

Coastal landforms, processes and habitats

Amongst the very small number of comparable dune systems containing sand sheets in Scotland and Great Britain, the undisturbed sand sheet at north Menie is the most extensive, dynamic and demonstrably systematic in its mode of transit. Furthermore, in view of the Northwest European context of the northeast coast of Scotland, the north Menie sand sheet is also of great interest and scientific value in the international context.

Approximately one third of Foveran Links SSSI is within the proposed development site and current evidence is that the SSSI possesses the finest suite of dynamism-related vegetation features in Scotland and the whole of the UK. It is a dynamic and mobile area of coast and the vegetation is entirely dependant on this continuous change. As the Environmental Statement (ES) recognises, Menie supports a particularly wide age range of dune slacks, which may be unique in Scotland in terms of completeness. Without the continuation of these dynamic processes of change, Menie would become like the more common types of dune systems around Scotland.

The development, if consented, would lead to loss of the special interest in that area, which, along with the adjacent beach area of the SSSI, would be an overall loss of 40% of the designated site. It would also lead to considerable loss of coastal habitat south of the SSSI, which, as recognised in the ES, is also of SSSI quality, and to habitats listed in Annex 1 of the Habitats Directive. Furthermore it is contrary to the aims, objectives and actions in the UK Coastal Sand Dunes Habitat Action Plan, with direct impacts leading to a loss of 82 hectares of coastal habitat and indirect impacts leading to loss and fragmentation of a considerably greater area.

SNH considers it is not possible to significantly mitigate or compensate for such a loss should this application be consented. The mitigation proposed fails to recognise that the communities which develop in these sand dune habitats represent many hundreds of years of ecological continuity. This does not lend them to translocation and once lost, many species would never return.

Supporting detail on the geomorphological and ecological impacts of the proposed development is contained in Appendices 1 and 2 to this letter.

SNH therefore objects to the proposal to construct a championship golf course in its current location. SNH can, however, see the potential to construct a single championship course on other adjacent land within the development site without causing significant impacts to this SSSI or sand dune habitats.

European Protected Species (EPS) – bats and otters

The survey reports in the Environmental Statement cover the area originally proposed for development, but not the areas of future residential housing and future golf. In addition, it is not clear if the proposed development would result in demolition/alteration of any buildings and felling of any large trees that might support bat roosts. Buildings and trees have not been included in the bat survey. There is therefore insufficient information to ascertain if there is likely to be a significant effect on bats and otters, as European Protected Species. SNH's advice is that further information should be obtained to make this assessment.

Badgers

There is likely to be an adverse impact on badgers, protected under the Protection of Badgers Act 1992. The Environmental Statement includes a badger survey but this has not identified the location of setts in relation to the various elements of the proposal or the impacts on the development on the foraging behaviour of this population of badgers. SNH advises that further information is necessary to assess the impact of the proposed development on badgers and identifying mitigation and licensing requirements.

Landscape

The proposed development would result in a significant loss of distinctive landscape character and quality that is recognised in the designations of Undeveloped Coast and an Area of Landscape Significance. It would also have significant adverse impacts on a locally and regionally important landscape character. There is no evidence within the Environmental Statement that an iterative and master planning approach to consider the capacity of the landscape to accommodate different scales of development has been adopted. Design opportunities, which reflect the quality and scenic value of the area, have not been adequately explored and reduction of adverse landscape and visual impacts has not been addressed to an acceptable level. Supporting detail on this is contained in Appendix 3 to this letter.

SNH's advice is that:

- The design development process has been inadequate and that opportunities to reduce landscape and visual impacts have not been explored.
- An iterative landscape capacity assessment, and associated development design should be undertaken.

Access and Recreation

The coastal sand dunes are currently used for informal recreation, with the highest visitor pressure in the area contiguous with Balmedie Country Park. SNH supports the proposal to produce an 'access strategy' for the proposed development in order to facilitate safe and responsible public access. SNH advises that to ensure that any access strategy or management plan is adequate to mitigate and compensate for the reduction in the opportunities for enjoyment of the natural heritage further survey is required to identify the

current level and types of visitor use. Supporting detail on this is contained in Appendix 4 to this letter.

Increased recreational pressure to the Ythan estuary, Sands of Forvie and Meikle Loch Special Protection Area (SPA) could occur if residents of the new housing and visitors to the resort visit the Ythan Estuary and the Sands of Forvie National Nature Reserve to the north of the proposed development in significant numbers. This potential impact is not assessed in the Environmental Statement. While these concerns do not form a basis to object to the development they may be significant in considering some of the detailed aspects, and any legal agreements, that form part of any consent. Supporting detail on this is contained in Appendix 2 to this letter.

Housing and Transport

The introduction of housing on this scale in this location is effectively creation of a new settlement and should be underpinned by a masterplan, which would identify infrastructure and facilities required such as shops, schools, and amenity facilities, including open space, as well as the provision of drainage and sewage. A design statement should consider how the housing fits into the landscape and its relationship to the rest of the development. It should also consider the scale, massing, orientation, and materials that would be used. SNH's advice is that the natural heritage impacts of housing in this location cannot be assessed without further detailed information and a master planning approach. Master plans form part of the Urban Design Toolkit promoted by PAN 67, Housing Quality.

THE ENVIRONMENTAL STATEMENT

SNH welcomes the assessment of impact on the ecological and geomorphological interest of the coastal sand dunes. However, SNH considers that the 'Consideration of Alternatives' in the Environmental Statement (ES) is inadequate. In particular, consideration should have been given to alternative layouts of the proposal within the development site, which avoided damaging sensitive coastal landforms, processes and habitats. This could have included the possibility of creating dune habitat further inland and building the golf course on that created habitat. Furthermore, there is little evidence that the design of the resort has been an iterative process, taking into account geomorphological, ecological, landscape and recreational impacts in its design.

A range of information expected for a development of this scale, on an environmentally sensitive site, is not present within the ES. This includes details of the Sustainable Urban Drainage Scheme (SUDS), information on the use of fertiliser, herbicide and irrigation (including the use of abstraction). The provision of this information would not alter the assessment of severe adverse impacts on the Foveran Links SSSI, other SSSI quality habitats, Annex 1 habitats and biodiversity. It would, nonetheless, allow for full assessment of the impacts and incorporation of improvements to protect the remaining natural heritage interest of the proposed development site.

The policy assessment is selective in its identification of policies and in the assessment against these policies there is an overestimation of the level of policy conformity.

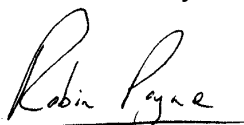
SNH has concerns about the sustainability assessment which we consider significantly underplays the impacts of the development and appears to contradict the conclusions of other chapters of the ES. Detailed comments on the policy and sustainability assessment are contained in Appendix 6 to this letter.

ADDITIONAL COMMENTS

As with all applications which are subject to an objection from SNH, we ask to be advised at the earliest possible stage about any proposed modifications, conditions or legal agreements relevant to our interests. Because this proposal affects the Foveran Links SSSI we remind you of the requirement to notify the Scottish Ministers if your Council is minded to approve planning consent against our advice in this case. Please let me know if you need any further information or advice from SNH in relation to this proposal. I should be grateful if you would let me know of your Council's decision in due course, or of any further changes to the proposal, which would be relevant to our interests.

In particular, if your Council is minded to approve planning consent please contact us to discuss conditions which may be attached to any consent.

Yours faithfully



ROBIN PAYNE
Area Manager
Grampian

cc Trump International Golf Links Scotland
Jenkins and Marr
SEPA

Enclosures:

- Appendix 1 – Geomorphology
- Appendix 2 – Ecology
- Appendix 3 – Landscape
- Appendix 4 – Access
- Appendix 5 – Legislation for European sites and species
- Appendix 6 - Policy Background and Sustainability Assessment

APPENDIX 1 - GEOMORPHOLOGY

1. NATURAL HERITAGE INTERESTS AFFECTED OR POTENTIALLY AFFECTED

1.1 Sites of National Nature Conservation Interest

Foveran Links Site of Special Scientific Interest (SSSI)

The northern part of the proposed development site covers approximately 33% of Foveran Links SSSI. Foveran Links is notified for both its biological and geological interests:

Biological	Extensive areas of mobile foreshore and sand dunes
Geological	Coastal Geomorphology

1.2 Biodiversity

Coastal sand dunes are identified in the UK Biodiversity Action Plan, through the Coastal sand dune Habitat Action Plan. Comments on Biodiversity are included in this letter in Appendix 2 - Ecology.

1.3 Sites of Regional Nature Conservation Interest

Part of the proposed development site is also within the Foveran Links Site of Interest to Natural Science as designated by the former Grampian Regional Council. The SINS includes Sands of Forvie and the Ythan estuary and extends south to Balmedie. Foveran Links is a SINS for its geomorphological, botanical, entomological and ornithological interests.

2. SNH APPRAISAL OF THE LIKELY IMPACTS OF THE PROPOSAL ON NATURAL HERITAGE INTERESTS

2.1 Interests

Foveran Links SSSI

Foveran Links SSSI represents a classic site for coastal dune geomorphology, with a wide variety of coastal landforms and processes, some of which are unique while others are representative of much of the dune coastline of north-east Scotland. The SSSI contains 3 dune systems, the southernmost being Menie Links, which lies within Menie Estate and is included in the proposed development site.

The unique elements of the Menie area of the SSSI (hereafter referred to as 'north Menie'), are the scale and dynamism of the large sand sheet (also known as the 'sand dome') which dominates it, the rate of inundation by sand of adjacent dune features and the lack of human interference. The unvegetated sand sheet is the most distinctive feature of the north Menie dunes and the most dynamic element of the site. It measures approximately 300 metres by 400 metres and extends from the main dune ridge inland, to where it inundates farmland.

The sand sheet has been in existence since at least 1946 and has gradually moved northwards, leaving behind it wet deflation hollows, that may flood seasonally. The lack of vegetational colonisation on the sand sheet suggests an environment hostile to the establishment of pioneer species and dune grasses that flourish on adjacent dunes, but once the sand sheet has moved on, the rate of colonization of the deflated surfaces left behind is rapid. The dune slacks themselves reflect this dynamism, as progressively older and generally more ecologically developed habitats are found at increasing distances from the trailing edge of the sand sheet.

Amongst the very small number of comparable dune sites containing sand sheets in Scotland and Great Britain, the undisturbed sand sheet at north Menie is the most extensive,

dynamic and demonstrably systematic in its mode of transit. Furthermore, in view of the relatively unique Northwest European context of the northeast coast of Scotland, the North Menie sand sheet is also of great interest and scientific value in the international context (Hansom 2007). Hansom, J.D., (2007 - in press) *Assessment of geomorphological interests at Foveran Links SSSI*. SNH Commissioned Report.

SNH considers that the area of the sand dome is considerably larger than stated in the ES, almost twice the size, however we acknowledge that seasonality and methodologies may contribute to this difference.

The other important features of north Menie are dune ridges, low undulating dunes, deflation surfaces, isolated butte dunes, dune slacks and blow outs. The interest of the SSSI lies not just in these features, but in the basin in which they sit, which is an emerged beach. The natural processes which have created and shaped these landforms are an essential and integral part of that interest. The erosional surfaces, which expose the underlying fluvio-glacial and emerged beach material provide a varied and unusual influence on the SSSI's dunes slacks (Doody, 2007).

Foveran Links Site of Interest to Natural Science

The geomorphological interest in the deflation areas and dunes of south Menie lies in the contribution they make to understanding the development of the Menie dunes as part of the whole dune assemblage.

The Balmedie extension is described in Appendix 6 to the ES as '80% of the area in question is a massive elongate area, about 500m from north to south and up to 250m wide, of mobile, shifting bare sand. Broadly whale-back shaped, the central south to north spine rises over 20mOD and has a few residual, dune fragments...'. The Balmedie extension area seems to contain many of the same landforms that occur in Menie & Foveran Links SSSI. The sand dome is described in Appendix 6 as 'larger & more complex' than that of north Menie and there is greater linkages between the beach and the dunes. The local upper beach erosion feeding local dune top accretion (compared with potentially ephemeral features on the upper beach at Menie).

In summary,

- **Foveran Links SSSI represents a classic site for coastal dune geomorphology, with a wide variety of coastal landforms and processes, some of which are unique while others are representative of much of the dune coastline of north-east Scotland.**
- **The most important feature is the large sand dome that dominates north Menie and which has moved steadily north since at least 1946, alternatively increasing and decreasing in size, and inundating adjacent dunes and habitats.**
- **Given the unique aspects of the SSSI (within a Northwest European context), the north Menie sand sheet is also of great interest and scientific value in the international context.**

2.2 Impacts

The ES shows that 9 holes of the Championship golf course would be wholly or partially created within the SSSI, as would part of the holiday home buildings and ponds constructed as part of the Sustainable Urban Drainage Scheme (SUDS). These golf holes also overlap with the 'areas of higher geomorphological interest' identified by Dawson & Ritchie (2006), in the ES. The holes entirely or partially overlie the main sand sheet.

The remaining holes of the Championship golf course, the golf Club House and its car park, caddy shacks, and golf academy and driving range, and further ponds for the SUDS, would be constructed on the undeveloped coastal habitats of south Menie. A further golf course would be constructed on coastal habitats in the area proposed for 'Future golf' ie the 'Balmedie extension'.

The ES states the 'Stabilisation of all mobile and bare sand surfaces will be undertaken', and that the 'proposal to stabilise large parts if not all of the active sand dome, which is arguably the most important single geomorphic element within the main SSSI'. SNH considers that this approach will destroy the most important landforms and processes within the SSSI, with enormous implications for the geomorphological and ecological designated features. Mitigation for these landforms, processes and habitats are scant, underdeveloped and are unconvincing when considering the range of features which will be lost. However, SNH considers that even with further work to develop mitigation or compensation proposals, it is unlikely to be possible to significantly mitigate or compensate for the loss of features that would occur should this application be consented.

The commendable aims of MEMAG seem to be at odds with the removal of dynamism at the site, which will not only remove the geomorphic interests but also the ecological functioning of the site.

In summary:

- **The high scientific interest of north Menie links largely derives from the dynamic nature of the sand sheet and its effect on adjacent processes and landforms. The proposed development would destroy much of the scientific interests at this site, to the extent of bringing into question its continued SSSI designation.**
- **Furthermore, if this area was developed, as proposed, it would lead to a loss which would be of concern as it would further increase the loss of geomorphic interest within the area and the Scottish resource. The Scottish sand dune resource is dominated by stable sand dunes, consequently these vast areas of dynamism (characteristic of the NE) are atypical and spectacular.**
- **SNH considers that even with further work to develop mitigation or compensation proposals, it is unlikely to be possible to significantly mitigate or compensate for the loss of features that would occur should this application be consented.**

Long term coastal management

There appears to be an assumption in the ES that the coast in these areas will remain stable or accreting during the lifetime of the project. This may not be a valid assumption and SNH considers there is a degree of uncertainty relating to future climate change.

The proposed development lies within a coastal sub-cell that stretches from Girdle Ness to Cairnbulg Point. This area is referred to as 'Aberdeen Bay'. Theoretically there are two sediment pathways which link the operations at Menie with the northern part of Aberdeen Bay. The first, and lesser, relates to sand-blow within the sand dome approximately northwards into shore-normal burns, where the sediment is returned to Aberdeen Bay and where the net movement is towards the north. The relative volumes involved in this will be minor in comparison to those within Aberdeen Bay.

The second, and more important, sediment pathway is along the beach frontage and is critical when the medium to longer-term management of the coast is considered.

The coastal management/land-use philosophy has not been stated for the golf course within the ES. There is no mention of the long-term survivability of tees, fairways and greens and any management philosophy regarding future coastal erosion compromising these items. Adaptive management, which would accept such changes, is a more sustainable form of land use, than one which attempts to “hold the line” against change.

The ES states that, unlike other golf courses, no use is made of the first ridge and beach for course purposes. This misleads, since many coastal dune links courses are now experiencing problems of frontal erosion, not because the holes and greens were originally sited on the first dune ridge closest the sea, but because unforeseen (and ongoing) erosion over the few hundred years or so of the life of these courses has removed the first dune cordon. Thus holes, greens and fairways designed to be landward of any initial threat now find themselves under threat. Given that the proposed Championship course is parallel to the coast and set behind the main dune ridge, the same problem could conceivably face holes 2, 3, 4, 7, 8, 9, 18, 13, 14, 15 and 18 in the future. Even if this scenario is deemed remote, SNH considers it makes sense to incorporate alternative design features into any new build course to accommodate any future change, as has been done for new-build courses elsewhere. There is no accommodation for such a shift in-built into the course design. In fact there is little detail on the longer-term management of the development with respect to climate change, sediment supply and sea level variations.

SNH would expect the details of the management philosophy for any golf course development on a soft coast, especially given the context of rising sea-levels and climate change. The absence of these details raises questions over the stated aims of leaving the main dune ridge free from any intervention. If the development does not adopt a principle of adaptive management, then intervention on the coastal edge is probable in the long-term, the circumstances of climate change and the broader evolution of Aberdeen Bay.

Within Aberdeen Bay, erosion occurs primarily in the southern $\frac{3}{4}$ of the bay, but this trend appears to be moving north. The erosional trend at Balmedie is of potential concern, as it highlights the proximity of the erosional processes within Aberdeen Bay. There have been historical fluctuations within the coastal edge at Menie links. Historical changes to Mean Low Water Springs (MLWS) and Mean High Water Springs (MHWS) are varied and show periods of accretion as well as erosion, however the upper-foreshore landforms at Menie show sand inundation as opposed to long-term accretion & colonisation. If the boarded phase of erosion and coastal retreat which dominates the southern $\frac{3}{4}$ of Aberdeen Bay extends to the Menie frontage, intervention is possible within their (inferred) approach to ‘hold the line’. This would then have direct effects on the littoral processes supplying material to the north and therefore possibly compromising the processes supporting the remainder of Foveran Links SSSI and the coastline northwards.

Championship Events

The ES (5.6.5) does not consider it appropriate and realistic to address the environmental impacts associated with the hosting of an event such as the British Open as it would be at least 10 years away. However, Chapter 15 states that ‘D J Trump has expressed his desire that the British Open be played at TIGLS in the future, therefore it is appropriate that the transportation assessment should take this into account’. Such events can bring several tens of thousands of visitors per day, which would be a potentially large destabilizing activity, which could cause significant damage to the geomorphological interests and SNH considers it both appropriate and relevant that impacts from hosting championship events is considered throughout the ES. It should be noted, however, that if the application is consented, significant damage would have already been caused through the construction of the resort and the interest of the site substantially lost.

In summary,

- **SNH considers that the coast may not remain stable during the lifetime of the project and erosion may occur along the front of the proposed development.**
- **The ES does not include a management philosophy stating whether it is proposed to 'Hold the Line' against any sand movement, new blow outs or coastal erosion, or whether the approach would be to 'Adapt to Changes' if the erosion started to compromise the landuse. SNH would expect these details for any golf course development on a soft coast and in a context of rising sea-levels.**
- **Any proposals for coastal intervention, would interfere with sediment transport and could potentially have adverse impacts on geomorphological features to the remainder of Foveran Links SSSI and the coastline northwards.**
- **The impacts of hosting championship events would be likely to be significant and should be considered in the ES.**

APPENDIX 2 - ECOLOGY

1. NATURAL HERITAGE INTERESTS AFFECTED OR POTENTIALLY AFFECTED

1.1 Sites of European Nature Conservation Interest

Ythan Estuary, Sands of Forvie and Meikle Loch Special Protection Area (SPA)

Ythan Estuary and Meikle Loch Ramsar Site

The proposed development is approximately 2 km south of the Ythan Estuary and Sands of Forvie. The Ythan Estuary, Sands of Forvie and Meikle Loch is a Special Protection Area (SPA), designated under the EC Directive 79/409/EEC on the conservation of Wild Birds ("The Wild Birds Directive"). The site also forms part of a Ramsar site under the Ramsar Convention on Wetlands of International Importance.

The Ythan Estuary, Sands of Forvie and Meikle Loch SPA, provides breeding grounds for internationally important numbers of breeding sandwich, common and little terns, and the largest breeding colony of eider ducks in Britain. The intertidal mud flats are an internationally important area for wintering and passage wildfowl and waders. Pink-footed and greylag geese and whooper swans regularly occur in nationally significant numbers.

The conservation objectives and reasons for designation for the Ythan estuary, Sands of Forvie and Meikle Loch SPA are available on SNH's website www.snh.org.uk through the SiteLink facility.

1.2 Sites of National Nature Conservation Interest

Foveran Links Site of Special Scientific Interest (SSSI)

It's not entirely clear from the maps provided, but the northern part of the proposed development site appears to include approximately 33% of Foveran Links SSSI. Foveran Links is notified as both a biological and a geological SSSI:

Biological	Extensive areas of mobile foreshore and sand dunes
Geological	Coastal geomorphology

1.3 Habitats of European Importance

The proposed development site supports the following habitats which are listed in Annex 1 of the EC Habitats Directive (Council Directive 92/43/EEC).

2120 Shifting dunes along the shoreline with *Ammophila arenaria*.

2130 Fixed dunes with herbaceous vegetation ("grey dunes"). (priority habitat)

2140 Decalcified fixed dunes with *Empetrum nigrum*. (priority habitat)

2190 Humid dune slacks.

1.4 Biodiversity

Coastal sand dunes are identified in the UK Biodiversity Action Plan, through the Coastal sand dune Habitat Action Plan.

1.5 Site of Regional Nature Conservation Interest

Part of the proposed development site is also within the Foveran Links Site of Interest to Natural Science as designated by the former Grampian Regional Council. The SINS includes Sands of Forvie and the Ythan estuary and extends south to Balmedie. Foveran Links is a SINS for its geomorphological, botanical, entomological and ornithological interests.

1.6 Protected Species

The proposed development site hosts a number of protected animal species, including European Protected Species such as otter and bat, and badgers which are protected under domestic legislation.

The site also hosts rare species of both higher and lower plants.

2. SNH APPRAISAL OF THE LIKELY IMPACTS OF THE PROPOSAL ON NATURAL HERITAGE INTERESTS

2.1 Sites of European Nature Conservation Interest

Ythan Estuary, Sands of Forvie and Meikle Loch Special Protection Area (SPA)

Ythan Estuary and Meikle Loch Ramsar Site

Impacts on the ornithological interests of the SPA and Ramsar site could potentially arise from increased recreational pressure from local residents and visitors to the resort and lighting. Dogs are more likely to be associated with residential developments than holiday accommodation, so consideration should be given to potential impacts on birds.

The ES states that disturbance of birds on the site by dog walking and any subsequent mitigation will be best addressed as part of the reserved matters application for the housing component of the proposal. SNH considers that all potential impacts on European sites should be considered before planning consent is granted. The legislative requirements for European sites are contained in Appendix 5 to this letter.

In summary,

- **SNH considers that the proposed development has the potential to have adverse effects on the integrity of European nature conservation sites. While these concerns do not form a basis to object to the development they may be significant in considering some of the detailed aspects, and any legal agreements, that form part of any consent.**

2.2 Sites of National and Regional Nature Conservation Interest

Foveran Links Site of Special Scientific Interest (SSSI)

Interest

The Foveran dune system has developed over at least the last 4000 years and together with Forvie to the North, forms one of the largest areas of wind blown sand in Britain. The dunes are part of a continuous strip of sand dune habitat which stretches from Bridge of Don to the south, to Newburgh, to the north. This entire stretch has by far the greatest area of bare sand in Scotland, and the majority of this lies between Balmedie and the Ythan. The area at Menie is some of the most natural and unmodified in this stretch and contains a range of dune slacks not represented in the Sands of Forvie Special Area of Conservation, to the north.

The geomorphological interest of Foveran Links SSSI is essential and integral to its biological interest. The range of plant communities at Foveran Links SSSI reflects the acid nature of the sand and the varying stability of the different dune types and associated land forms. It is highly likely that Foveran Links SSSI and the remainder of the coast between Balmedie and the Ythan comprise the finest suite of dynamism-related vegetation features in Scotland and indeed the whole of the UK. The dynamism of this system is dependent on continued natural processes and is critical to the biological interest of the site. Some of the most dynamic areas are within the development boundary.

In south Menie, ie the area to the south of the Foveran Links SSSI southern boundary (the area proposed for future golf in the south), the coastal landforms are more, though not entirely stable, with extensive areas of fixed dune grassland. Dune slacks are created by this dynamic process as the sand is blown away, down to the water table. The ES states that 'It has the largest areas of young dune slack, with much bare damp sand, and these are probably the largest extents of this habitat in Scotland and perhaps in Britain'. Most of the rare higher plants at Menie are found within the dune slack (see 'Higher Vascular Plants' below) and it is likely that this habitat will also be important for bryophytes (see 'Lower Plants' below). SNH agrees with the conclusion of the ES that the area south of the SSSI is also of SSSI quality.

Other habitats include extensive areas of fixed dune grassland and dune heath. The area proposed for future golf, the Balmedie extension, is largely bare sand on the sand dome, surrounded by mobile dune grassland, some semi-fixed dune grassland and dune slack.

Impacts:

The ES shows that 9 holes of the Championship golf course would be wholly or partially created within the SSSI, as would part of the holiday home buildings and ponds constructed for part of the Sustainable Urban Drainage Scheme (SUDS). The remaining holes of the Championship golf course, the golf Club House and its car park, caddy shacks, the golf academy and driving range, and further ponds for the SUDS, would be constructed on the undeveloped coastal habitats south of the SSSI. A further golf course would be constructed on coastal habitats in the area proposed for 'Future golf' along with a car park for visitors to the beach.

SSSIs are not only important in their own right, but as part of a network of sites across Britain representing those natural features that are nationally fragmented or of the highest quality. Each site represents a significant fragment of the much-depleted resource of wild nature now remaining in Britain. Therefore, if consented, this proposal would affect not just Foveran Links SSSI, but that whole national network.

There is no hole-by-hole account in the ES of the impact from the championship course on habitats as there is with the geomorphology. This seriously restricts SNH's ability to make any detailed comments on the likely ecological impact of particular holes. The NVC map provided with the ES is not sufficiently clear to use as a substitute. Nonetheless, even without such information, it is clear that the proposal would result in severe adverse impacts to the habitat interest of both Foveran Links SSSI and the area to the south, which is also of SSSI quality.

Very significant adverse impacts on coastal habitats would arise from construction works to create the elements of the development proposal. There would be direct impacts resulting from construction of the resort, and the figure supplied in the ES, of a total loss of 82ha of "important habitats" is highly significant. However, a much greater area of valuable habitat would be affected by indirect impacts and would be further fragmented and disturbed. Such impacts would arise from permanent disruption of coastal processes, through reprofiling of the landscape and stabilisation of the sand dome. The loss of a considerable amount of mobile sand from the system will result in over-stabilisation, loss of biodiversity, and loss of functionality.

Indeed, as stated in the ES, proposals to stabilise the sand domes 'will terminate the natural succession of plant communities and prevent the future natural development of habitats which rely on the dynamics of dune formation and sand mobility' (section 7.4.1).

The ES does not include a full assessment of impacts from construction, for example:

- On the location of gullies and pipes that would be used to collect and direct water to the Sustainable Urban Drainage Scheme (SUDS) and the impacts of this infrastructure.
- On where foul drainage from the club house or other associated buildings would go and how drainage and pollutants from the car park would be dealt with, and what impacts these could have on habitats and species.
- On the routing of pathways between any green and its successive tee position, of the infrastructure required and the impacts this will have.

In addition, further adverse impacts would arise from the operation and maintenance of the golf course and these impacts are not fully assessed in the ES. These include :

- Application of fertiliser, herbicide, introduction of new grasses, disposal of grass cuttings, and irrigation will lead to very significant ecological changes that are regarded as damaging.
- It is unclear if water abstraction is proposed, but if so, that would further alter the hydrology by lowering the water table in the areas where it was abstracted and could also lead to an increase in brackishness due to salt water intrusion. It would also alter the hydrology in areas where irrigation took place.
- Mowing would cause a cumulative loss of biodiversity, with plants unable to set seed and more vulnerable species dying out more quickly. Mowing is a particular threat to the heath, which is also a significant component of some of the dune. By the nature of golf, player-led heath destruction would extend well beyond the direct line of play
- There is no information on operational vehicle movements.
- Loss of rabbit grazing would also result in a lack of diversity.

The ES (5.6.5) does not consider it appropriate and realistic to address the environmental impacts associated with the hosting of an event such as the British Open as it would be at least 10 years away. However, Chapter 15 states that 'D J Trump has expressed his desire that the British Open be played at TIGLS in the future, therefore it is appropriate that the transportation assessment should take this into account'. Such events can bring several tens of thousands of visitors per day, which would have trampling impact on habitats, notably the slacks and lichen-rich heaths, and also coastal land forms and may require infrastructure which can give rise to additional adverse effects and SNH considers it both appropriate and relevant that impacts from hosting championship events is considered throughout the ES.

It should be noted, however, that if the application is consented, significant damage would have already been caused through the construction of the resort and the interest of the site substantially lost.

Mitigation proposed:

The ES states that the development of the golf course on the SSSI will take into account the most sensitive areas for geomorphological and biological integrity and that the design process has been iterative to allow the design to evolve in light of the constraints. SNH considers that there is little evidence in the layout of the development of this having been done.

The proposals for mitigation are scant on detail, approach, function and likelihood of success. One of the measures proposed is transplanting of habitats and species. However, SNH considers that transplanting is unlikely to succeed unless it is done in areas that are analogous in process terms, and suitable target areas are likely to be existing sand dune, so that there would be a further net loss of habitat even if the process succeeded.

Suggestions, such as the introduction of gorse, would be inappropriate, given the problems of rapid spread and subsequent control found in other similar locations.

The commendable aims of MEMAG seem to be at odds with the removal of dynamism at the site, which will not only remove the geomorphic interests but also the ecological functioning of the site.

Long term coastal management

There appears to be an assumption in the ES that the coast in these areas will remain stable or accreting during the lifetime of the project. This may not be a valid assumption and SNH considers there is a degree of uncertainty relating to future climate change.

It is possible that long term coastal management could result in adverse impacts to the remainder of Foveran Links SSSI and the coastline northwards, which is more fully detailed in Appendix 1 to this letter.

In summary,

- **Foveran Links SSSI possesses the finest suite of dynamism-related vegetation features in Scotland and the whole of the UK.**
- **The proposed development would lead to a loss of the special interest of over a third of the nationally important Foveran Links SSSI.**
- **The proposed development would lead to a loss of the special interest of habitats of SSSI quality south of Foveran Links SSSI.**
- **Habitat loss would not be restricted to footprint of the core golf facilities such as buildings, tees, greens, fairways and other infrastructure, but the entire boundary of the golf gorse on sand dune habitat. This loss is reflected in loss of functionality of processes, loss of overall biodiversity and direct or indirect habitat displacement.**
- **There is little evidence in the layout of the development of how it has been designed to avoid the most sensitive habitats and plants.**
- **Proposals for mitigation are scant on detail, approach, function and likelihood of success.**
- **SNH considers that even with further work to develop mitigation or compensation proposals, it is unlikely to be possible to mitigate or compensate for the significant loss of features that would occur should this application be consented.**

2.3 Habitats of European Importance

Under the Conservation (Natural Habitats, &c.) Regulations 1994 as amended, Aberdeenshire Council as a competent authority is required to have regard to the requirements of the Habitats Directive in the exercise of its functions (Regulations 3, part 4). The ultimate aim of the Directive is to maintain particular habitats at favourable conservation status, primarily through designation of Special Areas of Conservation, but also by management of these habitats in the wider countryside. The proposals may impinge on the conservation status of the following habitats by significantly reducing their extent:

*2120 Shifting dunes along the shoreline with *Ammophila arenaria**

This habitat is often restricted to a narrow fringe parallel to the beach, but at this site is extensive due to the high mobility of sections in the vicinity of the Menie sand dome and in the southern extension to the site. This habitat is closely linked ecologically to the areas of bare sand. If these bare areas were extensively stabilised, as proposed, this habitat would be very adversely affected, losing extent and functionality.

2130 Fixed dunes with herbaceous vegetation (“grey dunes”).

This priority-rated habitat includes the greater part of the stable dune at this site and is significantly affected by the application. It should be noted that there is a strong heath component to some of the grey dune vegetation, making this vegetation almost as vulnerable as heath types to mowing and even play.

2140 Decalcified fixed dunes with Empetrum nigrum

The main area of this habitat is in the south of the current course layout, just to the north of the Blairton Burn. The course layout appears to cut through this area, which is likely to destroy areas of a priority-rated European habitat with a very restricted UK distribution, being limited to a total extent of 338ha in the *Sand Dune Vegetation Survey of Scotland* (all UK extent is in Scotland).

2190 Humid dune slacks

The margins of areas of this habitat on the ES map appear to be impacted by fairways or other features, including the largest slack to the south of the Menie sand dome. The continuity of the water table is essential to the integrity of dune slack, as is the transition with adjacent habitat. As the ES states, there are aspects of dune slacks at this site that are unusual in the UK. Foveran Links SSSI (in the widest sense) supports a wider range of dune slack habitat than Sands of Forvie and the Ythan Estuary SSSI to the north.

Article 10 of the Habitats Directive requires Member States to encourage the management of features of the landscape which are of major importance for wild flora and fauna with a view to complementing and improving the ecological coherence of the Natura 2000 network. Revised Guidance Updating Scottish Office Circular 6/1995, clarifies that such features include coastal habitats.

In summary,

- **the proposed development may impinge on the conservation status of four habitats listed in the European Habitats and Species Directive by significantly reducing their extent.**

2.4 Biodiversity

The Scottish Biodiversity Strategy “Scotland’s Biodiversity: It’s in your hands”, was published by the Scottish Executive in 2004. Its objectives include halting the loss of biodiversity and continuing to reverse previous losses through targeted action for species and habitats. The strategy promotes delivery of UK and Local BAP targets and highlights the responsibility of public bodies, the private sector and others to help meet these.

The Nature Conservation (Scotland) Act 2004 places a duty on all public bodies to “further the conservation of biodiversity” as they carry out their work. The Scottish Biodiversity List is a list of flora, fauna and habitats considered by the Scottish Ministers to be of principal importance for biodiversity conservation. The Scottish Biodiversity List is a tool for public bodies and others in delivering their Biodiversity Duty. The following habitats, identified in the ES as present on site, are included in the Scottish Biodiversity List.

<i>Ammophila arenaria</i> mobile dune community	SD6
<i>Ammophila arenaria</i> - <i>Arrhenatherum elatius</i> dune grassland	SD9
<i>Ammophila arenaria</i> - <i>Festuca rubra</i> semi-fixed dune community	SD7
<i>Carex arenaria</i> - <i>Festuca ovina</i> - <i>Agrostis capillaris</i> dune grassland	SD12
<i>Sagina nodosa</i> - <i>Bryum pseudotriquetrum</i> dune-slack	SD13 – very restricted in the UK and known from only 2 sites in Scotland, one being Foveran.

<i>Salix repens-Holcus lanatus</i> dune-slack	SD16
<i>Calluna vulgaris-Carex arenaria</i> dune heath	H11

All these habitats come within the scope of the Coastal Sand Dune Habitat Action Plan (SDHAP), the purpose of which is to prevent further loss of sand dune habitat to development and to offset expected losses of dune resource due to erosion, human factors and climate change factors through restoration of damaged, and the accretion of new sand dune habitat. Indeed, many previously damaged dune systems are now being managed to re-introduce dynamic instability into the geomorphology in order to promote habitat diversity.

The development proposals are inconsistent with these broad objectives as well as several of the UK SDHAP's specific targets. In addition, there is no acknowledgement of any mitigation for habitat loss via the creation of new dune habitat, indeed quite the reverse since the planned development (including the additional "Balmedie extension") involves removal of prime dune habitat. Such deficiencies highlight the lack of any vision for coastal strategic sustainability and sustainable development.

In summary,

- **the development proposals are inconsistent with the broad objectives as well as several of the specific targets in the UK Coastal Sand Dunes Habitat Action Plan.**

2.4 Protected Species

SNH commends the stated intention to prepare and implement Species Protection Plans for the protected species on site, in the event that permission for the development is given.

2.4.1 European protected species: Otters and Bats

Otters and bats are European Protected Species (EPS), as they and their resting places are protected under the EC Habitats and Species Directive implemented in Britain under Regulation 39 of the Conservation (Natural Habitats, &c.) Regulations 1994, as amended. This means that it is an offence to deliberately or recklessly kill, injure, or take any EPS; to disturb a EPS while in a place of shelter; or to damage, destroy or obstruct access to any bat roost. Some of these activities can be carried out under licence from the Scottish Executive as explained in the Appendix 5 to this letter, which gives full details of the legal situation which applies to EPS.

NB the legislative wording in the ES relating to the Conservation Regulations requires updating in light of the 2007 Amendment Regulations.

Otters

The ES states that otters make regular use of 3 watercourses that pass through the development site. No otter holts or couches were found and SNH welcomes the mitigation measures proposed, should permission be given. However, the ES does not provide a map of the watercourses surveyed, to show that this was adequate and included the extensions to the development (future housing and golf) and a suitable buffer area around the site. Prior to any permission being granted, SNH advises that the applicant be asked to provide this information and that if this shows the survey to be inadequate, that further survey of these areas be carried out by a suitably experienced person. If a survey is undertaken, SNH can give further advice on whether a licence from the Scottish Executive would be necessary to carry out the proposed work.

Bats

Bats will form roosts in buildings and trees, particularly those that are large with a complex growth form. It is not clear from the ES whether any buildings are to be demolished or

altered, or if any trees suitable for bats are due to be felled. If this is the case, SNH advises that they are surveyed for bat roosts at the earliest opportunity, prior to determining whether planning permission should be given. The survey should be carried out by a suitably experienced person. To enable them to give accurate information about mitigation measures and timing of works, they will need to see the development plans that have been proposed. Once a survey has been undertaken, SNH can give further advice on whether a license from the Scottish Executive would be necessary to carry out the proposed work. Surveys are best carried out in the summer between mid-May and August.

If no buildings are due to be demolished or altered, and no mature trees are to be felled, the proposed development should not have any impact on bats.

2.4.2 Water voles

Water voles are protected under schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This means that their places of shelter or protection are protected, but not the animals themselves. SNH's current interpretation of The Nature Conservation (Scotland) Act 2004 which amended the Wildlife and Countryside Act, is that in a situation where any water vole burrows or shelters would be damaged or destroyed as a result of the proposed activity, the defences afforded by the Wildlife and Countryside Act could not be relied upon. Furthermore, there is no provision to licence such activities for the purpose of development under the Act. However, for further clarification, we recommend you also contact the Scottish Executive who are the licensing authority for such activities

SNH notes that no evidence of water voles was found during the survey. However, it is unclear if the area surveyed included watercourses in the extensions to the development (future housing and golf) and if it included ditches, which water voles will potentially colonise. Should planning consent be granted, SNH recommends that further survey is carried out of the extensions to the development and any suitable ditches omitted from the 2006 survey.

2.4.3 Badgers

The ES identifies a main and outlier badgers setts within the proposed development site, indicating that the area is used by a social group of badgers. Badgers and their setts are protected in Britain by the Protection of Badgers Act 1992, as amended by the Nature Conservation (Scotland) Act 2004, whereby it is an offence to wilfully take, kill or injure a badger: to obstruct, destroy or damage a sett or to disturb a badger whilst occupying a sett, with intent or recklessly. A sett is defined in the Act as any structure or place, which displays signs indicating current use. Where activities are unavoidable, there is provision for some of these activities to be carried out under licence. SNH is the licensing authority for sett interference or disturbance to a sett, which may result from land development.

There is insufficient information currently available to assess the impact the development may have on badgers. In particular:

- The ES and accompanying badger report do not provide a map of the area surveyed, to show whether this was adequate and included the extensions to the development (future housing and golf) and a suitable buffer area around the site.
- There is insufficient assessment of the impact of the proposed development on the badger setts identified in the survey. As well as direct impacts on setts and loss of habitat, indirect impacts should be considered such as risk of encounters with hazardous materials egg oils; illumination potentially affecting behaviour; use of pesticides and fertilisers altering the balance of available prey species; presence of

accessible food waste encouraging wild mammals to alter their diets and possibly cause a nuisance; foraging of badgers on landscaped areas and residential gardens.

Badgers are territorial animals and there may be other badger social groups in the vicinity of the proposed development. Any requirement to exclude a badger sett could only be carried out under licence and may require further survey to identify neighbouring social groups of badgers, boundaries of territories, and the impacts of excluding badgers.

2.4.4 Birds, Invertebrates and Bryophytes

We note that further surveys for birds, invertebrates and bryophytes are due to take place and look forward to receiving the reports of these surveys in due course.

2.4.5 Higher plants

The proposed development site supports four Red Data Book species of higher plants, however, these are incorrectly assigned "regional importance" in the ES. *Carex maritima*, Curved Sedge, is classed as "endangered" in the most recent 2006 British Red Data Book listing, which is the second highest category of threat. Also in the 2006 listing *Pyrola media* is classed as Vulnerable, and *Festuca arenaria=juncifolia* and *Ophioglossum azoricum* are Scarce.

The ES anticipates that at least 50% of the population of curved sedge (*Carex maritima*) would be lost as a result of the proposed development. This Menie population is one of the top ten British sites for numbers of plants, and is the largest south of Caithness on the east coast.

Intermediate Wintergreen, *Pyrola media*, is a Species Action Framework species, as it has shown a decline throughout its range, which is mainly Northern England and North East Scotland, and North East Scotland is now its UK stronghold. This was recorded in two locations, dune slack and dune heath, therefore it is possible they could be different *Pyrola* species which could be checked by further survey.

Almost all the populations of adder`s tongue fern, *Ophioglossum azoricum*, would be lost as a result of the proposed development (p. 108, p. 116, Fig 7.2). There are only two other mainland UK locations, though it occurs in Orkney and Shetland. Although some efforts have been made in designing the course to avoid populations of these plants. Should planning permission be granted, further efforts could be made to protect these, such as by moving or realigning hole 18.

2.4.6 Lower Plants

Overall, the proposed development site contains a good, but not exceptional assemblage of lichens and fungi for a coastal dune site. The site does, however represent a relatively large proportion of such habitat in Scotland and contributes to the continuity of habitat between Aberdeen and Collieston. We would emphasise that the communities which develop in these sand dune habitats represent many hundreds of years of ecological continuity. This does not lend them to translocation and once lost, many species will never return.

The majority of lichen species of conservation concern were epiphytes on the parkland trees around Menie House, and these could be protected through measures to retain the trees.

SNH understands a bryological survey will be carried out this spring/summer and this should include mitigation proposals. Within coastal habitats dune slacks are important habitats for bryophytes. Any increase in nutrient input to the site, for example from fertilisers, particularly

to the dune habitats, is likely to have an adverse impact on bryophyte and lichen communities. This is principally through over-growth by fast-growing vascular plants. This is a particular concern for the dune slack areas as the ES states that 'Fertiliser [and irrigation] will be needed to maintain a grass cover on the stabilised dunes and this will be flushed through to the lowest ground'.

The reduction in rabbit grazing is likely to have a severe mid/long-term impact on the bryophyte and lichens due to changes in the vegetation structure.

Any drainage of dune slacks or lowering of the water table, for example as a result of abstraction, will negatively impact the bryophyte communities because many species are not desiccation resistant over long dry periods or require wet conditions for spores to develop.

Disturbance of dune slacks will have a detrimental impact on the waxcap community of fungi. Although no species is of individual conservation concern, the community has European importance and loss of area should be minimised. We are not aware of where translocation has been successful and would welcome references to studies that demonstrate this.

The ES suggests a 40m buffer zone around the lichen *Leptogium palmatum*. This is a nationally scarce Red Data Book species of old dunes. The mitigation may suffice to protect the species in the short-mid term, however, vegetational succession is likely to result in a deterioration in the species abundance at any one location in the long-term. Mitigation should consider this long-term impact if dune succession is inhibited.

We have commented on the feasibility of recreating dune habitats above, and in addition, would like to emphasise that it is normally very difficult to recreate the long periods of habitat continuity and the complexity of habitats in a biologically meaningful way.

APPENDIX 3 – LANDSCAPE

1. NATURAL HERITAGE INTERESTS AFFECTED

The dune and beach areas of the proposed development site are designated as being of Landscape Significance by Aberdeenshire Council and the whole development site is within an area designated as Undeveloped Coast. Under the *South and Central Aberdeenshire: landscape character assessment*, (Environmental Resources Management 1998 SNH review No. 102.), the coastal strip is characterised as Formartine Links and the inland part of the site as Formartine Lowlands.

The landscape character of the *Formartine Links LCA*, as described in the ES, comprises extensive sands and beaches, including dunes, which have a windswept open character with a predominant cover of scrubby gorse and rough grazing behind the dunes. The dunes themselves are typically tufted with marram grass or bare of vegetation. In particular the open, exposed landscape with long views renders it sensitive to vertical elements, which could have a considerable impact on visual amenity. Development, which includes ornamental planting and new large scale built development, could alter the wild and exposed character of the coastline.

Within the adjacent *Formartine Lowland LCA* the flat open landscape character has extensive visibility, such that piecemeal development and prominent farm buildings can be highly noticeable in views: good design measures and use of simple forms and shapes reduces the prominence of such features. Whilst the large-scale landscape may be able to accommodate individual large houses and farms, the assessment does highlight that the settlement patterns are distinctive and susceptible to extension and loss of identity.

2. SNH APPRAISAL OF THE LIKELY IMPACTS OF THE PROPOSAL ON NATURAL HERITAGE INTERESTS

From the outset, a key attraction of the location of this development at Menie has been the unique landscape setting and scenic quality of the area. SNH considers that the proposal would significantly alter these characteristics, to the extent that the landscape character and visual amenity of the area would change, and the originally sought qualities would no longer exist or could not be appreciated.

SNH considers that the proposed development would result in a significant loss of distinctive landscape character and quality that is recognised in the designations of Undeveloped Coast and Area of Landscape Significance, and which would be a departure from the local development plan policies.

Significant adverse impacts from this development would also result in a major change on this landscape character. This is contrary to the guidance contained within NPPG 14 Natural Heritage, which recognises the importance of safeguarding and protecting the variety and distinctiveness of Scotland's landscape and in the SNH landscape character assessments. The scale, siting and design of the proposal, has not taken full account of the character of the landscape and the potential impact on the local environment.

The extent of impacts of the Early Operation development (defined in the ES as hotel, holiday homes, villas, golf club house etc.) combined with the Long Term residential development and future golf course, would cause extensive landscape change such that much of the existing sand dune coastal resource north of Balmedie would be lost and the remaining resource would be significantly depleted. The Early Operation and Long Term

developments would cause a significant level of adverse landscape and visual impacts to the landscape character, including the settlement pattern, of the area.

The significant adverse visual impacts of the development from both early Operational and Long Term proposals extends outwith the immediate site to the wider area between Balmedie and Newburgh. The significant visual envelope of the development is experienced by high sensitivity receptors along approximately 7kms of coastline, which is designated for landscape value and its undeveloped character. The Early Operation development, in its current form, would impose a high level of significant visual impact. The significant visual impact of the Long Term residential development would impose additional cumulative impacts on the receptors that would have already been extensively affected by the earlier developments.

There are examples of large scale landmark buildings associated with championship golf course development, which reflect the status of the international quality golf resorts. What is being proposed is therefore not entirely unprecedented, but as described below (whilst not an exhaustive list) the scale of these existing golf hotels is substantially lower than that proposed for Menie:

- The Old Course Hotel, St Andrews – maximum 5 storeys to roof eaves;
- Paramount Marine Hotel, Troon, Ayrshire – host hotel for Open at Royal Troon – maximum 4 storeys (extending 3 storeys into roof space);
- The Westin Turnberry Resort, Ayrshire – maximum 3 storeys (extending 1 storey into roof space)
- Carnoustie Golf Course Hotel and Resort, Angus – maximum 4 storeys (extending 1 storey into roof space).

The extensive nature of the significant adverse impacts across the site and within the wider study area, the scale and extent of development proposed appears to contravene the development plan.

The *Guidelines for Landscape and Visual Impact Assessment*. (2nd Edition, by The Landscape Institute with the Institute of Environmental Management and Assessment 2002) recommends an iterative approach, by masterplanning the site to mitigate as far as practicable against the impacts identified. There is no evidence within the ES that this masterplanning approach, considering the capacity of the landscape to accommodate different scales of development, has been utilised. The ES does not provide any illustration that there was consideration of alternative layouts or scales of development to mitigate adverse significant effects within Menie Estate. A methodology to include a masterplanning approach and consideration of alternatives was recommended by SNH at scoping.

Contrary to the statement in the ES, there does not appear to be an overriding design philosophy, which is responsive to the character of the area. There is no Design Statement, which would be in accord with the guidance set out in PAN 68 Design Statements. The ES does not provide adequate supporting information regarding the design development process, which underpins the proposed masterplan layout, architectural styles, and landscape proposals for this area. Design opportunities, which reflect the character, quality and scenic value of the area, have not been adequately explored and a reduction of adverse landscape and visual impacts has not been fully addressed.

In summary,

- **The proposed development would result in a significant loss of distinctive landscape character and quality that is recognised in the designations of Undeveloped Coast and an Area of Landscape Significance.**
- **The proposed development would have significant adverse impacts on landscape character.**
- **The adverse significant visual impacts of the development extend outwith the immediate site to the wider study area between Balmedie and Newburgh.**
- **There is no evidence within the ES of a design philosophy and statement, as recommended in guidance set out in PAN 68 Design Statements.**
- **There is no evidence within the ES that an iterative and masterplanning approach to consider the capacity of the landscape to accommodate different scales of development has been adopted.**
- **Design opportunities, which reflect the landscape character, quality and visual amenity of the area, have not been adequately explored and a reduction of adverse landscape and visual impacts has not been addressed to an acceptable level.**
- **The appropriateness of the landscape mitigation scheme requires further consideration.**

APPENDIX 4 – ACCESS AND RECREATION

1. NATURAL HERITAGE INTERESTS AFFECTED

The area of the proposed development site is currently used for informal recreation, primarily on the coastal sand dunes. The area is contiguous with Balmedie Country Park, which receives upwards of 220,000 visitors annually. The northern boundary of the country park is not demarcated on the ground, and visitors also use the area to the north of the Park, identified in the proposals as 'Future Golf', and it is possible they are unaware they are outside the Park boundary.

The ES identifies that the recreational activities likely to be directly affected by the proposed development include informal children's play, environmental education, bird watching, horse riding, walking, dog walking, running and orienteering. In particular, the ES states that the popular circular route from Balmedie Country Park, along the beach to Blairton Burn, alongside the burn and returning through the dunes would be severed by the proposed development.

2. SNH APPRAISAL OF THE LIKELY IMPACTS OF THE PROPOSAL ON NATURAL HERITAGE INTERESTS

Recreational use and assessment of impacts

The ES does not fully assess the potential change in recreational users' experience of the area as a result of the proposed development. This area is defined as 'undeveloped coast', and currently provides a sense of remoteness and solitude within a relatively short distance of a large urban conurbation. Information on the North Sea Trail website highlights the isolation of the huge beach and dune system north of Aberdeen. The scale of the proposed development will undoubtedly alter the perceptions of visitors and make it feel much more developed.

Furthermore, the ES does not fully consider the loss of opportunity the development will create for those who already enjoy the area. Under the Land Reform (Scotland) Act 2003, the current access rights that apply here entitle people to the full range of responsible access, but if the land becomes a golf course those rights will be restricted so that people only have the right 'to cross land'. Should the application be approved, the implications of this would need to be addressed in an access management plan, both in planning paths which adequately allow people to cross the land, and also in providing information so that people are fully aware that their access position has changed significantly.

The ES does not appear to fully consider the recreational needs of residents in the areas proposed for future housing and visitors to the resort, and the impacts resulting from increased recreational pressure on coastal habitats and existing recreation areas, such as Balmedie Country Park.

Mitigation

NPPG13 (Coastal Planning) states that public access should form a positive feature of schemes for new development. SNH recommends that, if planning approval is given, further consideration be given to measures to mitigate the identified impacts on recreation and access.

The mitigation section in the ES is limited to stating that standard procedures will be used to mitigate potential construction impacts and a range of measures, including a requirement for high quality building design and landscaping, used to mitigate the visual impact during the operational phase. Elsewhere, identified measures to reduce construction impacts on the

community include temporary path diversions and signage. The summary of environmental commitments in the ES indicates that one of the mitigation objectives for recreation, access and community effects is to screen and integrate the new development, but there is no indication of what would, or could, mitigate the impact of the development for recreational users at this coastal location.

Another stated objective is to reduce/avoid impacts on the existing site access by tying the internal site footpath network into the existing surrounding footpath network. If planning approval is given, SNH would welcome this intention to develop links to the path network at Balmedie, but in the absence of detail cannot assess whether this objective is likely to be achievable. No consideration appears to have been given to mitigating the impact on visitors to Balmedie Country Park by leaving a buffer zone between the Country Park boundary and the proposed development.

Access provision to the proposed development site

SNH welcomes the proposal to produce an 'access strategy', which would formalise the proposed access arrangements in order to facilitate safe and responsible public access. If planning approval is given, SNH recommends that better information on current visitor use and experience of the site would be an essential prerequisite to developing an effective plan.

If planning approval is given, we would also recommend that there should be one plan covering the whole site; covering both initial and future development. The plan should include details of all the paths (including location, surfacing, lighting, crossings, bridges), signage relating to public access and other related infrastructure such as cycle parking. It should also include information about how access issues for visitors and residents will be managed during the construction period, including the temporary diversion of any paths and the provision of alternative routes where necessary with associated signage.

If planning permission is given, we would welcome the provision of pedestrian/cycle paths alongside the main distributor roads for the safe and easy travel of staff and visitors around the main part of the site, and the presumption that walking will be the dominant mode of travel in the proposed resort centre. Details such as the surfacing, lighting, crossings and signage for these paths would be necessary and we would also welcome the use of approaches advocated by SPP17 (Planning for Transport), especially in relation to housing.

In summary,

- **the development of the future golf area in particular raises several significant issues relating to recreation and access, namely:**
 - **restriction of access rights, the loss of recreational opportunities, and the loss of a valuable environmental education resource**
 - **adverse effects on the experience of recreational users, especially those seeking the isolation and naturalness of an area of undeveloped coast**
- **The ES does not fully assess current use of the proposed development site and how recreational users' experience of the area would change as a result of the proposed development**
- **SNH considers that inadequate consideration has been given to measures to mitigate the identified impacts on recreation and access**
- **SNH welcomes some proposals, in particular, the intention to produce an access strategy or plan in order to facilitate safe and responsible public access. If permission is given, this should be produced at an early stage so that it is integrated into the detailed design plans**

Appendix 5

Legislative Requirements for European Sites

Ythan Estuary, Sands of Forvie and Meike Loch Special Protection Area (SPA)

The site's status as a classified SPA under the EC Directive 79/409/EEC on the Conservation of Wild Birds (the "Birds Directive"), means that the Conservation (Natural Habitats, &c.) Regulations 1994 as amended, (the "Habitats Regulations") apply. The requirements are summarised in SE Circular 6/1995 as amended June 2000 and include, at paragraph 12,

"The Regulations (48) require that, where an authority concludes that a development proposal unconnected with the nature conservation management of a Natura 2000 site is likely to have a significant effect on that site, it must undertake an appropriate assessment of the implications for the conservation interests for which the area has been designated."

The need for appropriate assessment extends to plans or projects outwith the boundary of the site in order to determine their implications for the interest protected within the site.

Under Regulation 48 of the Habitats Regulations, this means that Aberdeenshire Council, as competent authority, has a duty to:

- determine whether the proposal is directly connected with or necessary to site management for conservation; and, if not,
- determine whether the proposal is likely to have a significant effect on the site either individually or in combination with other plans or projects; and, if so, then
- make an appropriate assessment of the implications (of the proposal) for the site in view of that site's conservation objectives.

The competent authority can only agree to the proposal under Regulation 48 after having ascertained that it will not adversely affect the integrity of the site.

If this is not the case, and there are no alternative solutions, the proposal can only be allowed to proceed if there are imperative reasons of overriding public interest, which in this case can include those of a social or economic nature. If you propose to approve the plan on the grounds of imperative reasons of overriding public interest then Regulation 49 states that you must inform Scottish Ministers and you must not issue approval for a period of 21 days after receipt by Scottish Ministers unless notified otherwise. If proposals are allowed to proceed in accordance with Regulation 49 then it should be noted that Regulation 53 requires that Scottish Ministers shall secure that any necessary compensatory measures are taken to ensure that the overall coherence of Natura 2000 is protected.

The legislative requirements are summarised in SE Circular 6/1995 as amended June 2000. Annex A provides further details of the legislative requirements.

Legal Position on European Protected Species: Otters, Bats and Great Crested Newts

Regulations 39 and 43 of The Conservation (Natural Habitats &c.) Regulations 1994 (as amended) (Habitats Regulations) provide full protection for certain animal and plant species. The species identified above are referred to as European protected species and are listed on Schedules 2 (animals) and 4 (plants) of the Habitats Regulations.

This means it is illegal to:

- Deliberately or recklessly capture, injure or kill a European protected species of wild animal or to deliberately or recklessly (i) harass an animal or group of animals; (ii) disturb an animal while it's occupying a structure or place used for shelter or protection; (iii) disturb an animal while it's rearing or otherwise caring for its young; (iv) obstruct access to a breeding site or resting place, or otherwise deny the animal use of the breeding site or resting place; (v) disturb an animal in a manner that is, or in circumstances which are, likely to significantly affect the local distribution or abundance of the species to which it belongs; (vi) disturb an animal in a manner that is, or in circumstances which are, likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young
- Deliberately or recklessly take or destroy its egg
- Deliberately or recklessly disturb any cetacean
- Damage or destroy the breeding sites or resting places of such animals
- Deliberately or recklessly pick, collect, cut, uproot or destroy European protected species of wild plant

Where it is proposed to carry out works which will affect European protected species or their shelter/breeding places, whether or not they are present in these refuges, a licence is required from the licensing authority (in this case likely to be Scottish Executive). It is strongly advised that you refer to the Scottish Executive information on the current interim licensing arrangements, which can be found in the document *European Protected Species, Development Sites and the Planning System: Interim Guidance for Local Authorities on Licensing Arrangements*, (October 2001) before applying for a licence. Copies of this are available at <http://www.scotland.gov.uk/library3/environment/epsg-00.asp> or by writing to the Landscape and Habitats Division, Scottish Executive Environment and Rural Affairs Department, Room GH 93, Victoria Quay, Edinburgh EH6 6QQ or by telephoning 0131 244 7140.

As highlighted in the Interim Guidance, three tests must be satisfied before the licensing authority can issue a licence under Regulation 44(2) of the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) to permit otherwise prohibited acts. An application for a licence will fail unless all of the three tests are satisfied. The three tests involve the following considerations:

- Test 1 - The licence application must demonstrably relate to one of the purposes specified in Regulation 44(2) (as amended). For development proposals, the relevant purpose is likely to be Regulation 44(2)(e) for which Scottish Executive is currently the licensing authority. This regulation states that licences may be granted by Scottish Executive only for the purpose of *“preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment.”*
- Test 2 - Regulation 44(3)(a) states that a licence may not be granted unless Scottish Executive is satisfied *“that there is no satisfactory alternative”*.
- Test 3 - Regulation 44(3)(b) states that a licence cannot be issued unless Scottish Executive is satisfied that the action proposed *“will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range”* (Scottish Executive will, however, seek the expert advice of Scottish Natural Heritage on this matter).

Consideration of European protected species must be included as part of the planning application process, not as an issue to be dealt with at a later stage. Any planning consent given without due consideration to these species is likely to breach European Directives with the possibility of consequential delays or the project being halted by the EC, as has happened previously.

Appendix 6 - Planning Policy and Sustainability Assessments

1 Planning Policy Assessment

1.1 Summary

The Planning Statement cites very few policies, and presents a subjective and overly positive assessment of planning policies. The assessment in the ES, Chapter 9, is more comprehensive, but both assessments are selective in their identification of policies.

The ES assessment highlights the difficulties of compliance with housing policies. It is less forthcoming on the lack of compliance with natural heritage, coastal, sustainability and other environmental policies. Moreover, in interpreting the conclusions of other chapters of the ES selectively it thereby overestimates the level of policy conformity. This is a failing and significantly underestimates the level of potential policy conflict.

1.2 National Planning Framework

The National Planning Framework (NPF) sets the context of development in Scotland. It highlights the quality of the environment as the backdrop to life in Scotland. The NPF's aims include to promote sustainable development and to protect and enhance the quality of the built and natural environment.

The development is not likely to meet all the aspirations of the NPF in terms of its sustainability. While providing support for economic development, the NPF also gives considerable weight to reducing the causes of climate change. The development does not adequately demonstrate how it will minimise resource use and transport requirements to meet sustainable development aims. In order for the development to meet the policies of the National Planning Framework, it would be necessary for the development to demonstrate how it meets all sustainability objectives, not just economic ones.

1.3 National Planning Policies

1.3.1 SPP1 The Planning System

The proposed development does not meet the aspirations of SPP1 for a number of reasons. The planning assessment is highly selective in its assessment of the aim of SPP1 and ignores the references to sustainable development and the maintenance of environmental quality. Primarily SNH considers that the development will have adverse impacts on the environmental quality of the site through significant impacts on the natural heritage. These impacts have not been sufficiently reduced or mitigated through the design to be discounted.

1.3.2 SPP2 Economic Development

The ES presents an oversimplification of SPP2 and misses out some crucial sections, particularly in relation to sustainable development. SPP2 states the importance of protecting the built and natural heritage and of high quality design in relation to the development's setting.

1.3.3 SPP3 Planning for Housing

SPP3 seeks to guide housing in terms of quality, sustainable use of resources and re-use of land, access to services and accessible forms of transport other than the private car and recommends the use of Design Statements to achieve these. The assessment talks of the use of mitigation to ensure that the development is “environmentally satisfactory”. This does not reflect the policy drive in SPP3 for high quality developments that respect their environment. Given the lack of information provided on the housing element, it has been impossible to consider this aspect properly and it is not yet possible to say whether it will meet the requirements of SPP3.

1.3.4 SPP6 Renewable Energy

SPP6 addresses both large scale renewables and smaller scale micro-renewables. Its focus for new developments is on carbon efficiency and on site-based renewable energy production for developments over 500m². The current development does not identify carbon reduction through its design and technology. There are no proposals stated in the ES or planning applications for micro-renewable energy generation. Overall the development does not address the requirements of SPP6.

1.3.5 SPP7 Planning and Flooding

The Drainage Impact Assessment does not address the issue of coastal flooding. The coastal fringe is highlighted in the SEPA flood maps. Therefore, the ES should consider the impacts of the development on the dynamic coastal geomorphology and the protection afforded to the development site by the mobile dunes. The drainage assessment could have considered the impacts of climate change on the flooding potential of the site from more frequent storm events. SUDS may provide management of rain water, but is unlikely to mitigate the impacts of storm water. It is not clear whether the development accords with this policy.

1.3.6 NPPG13 Coastal development

This policy identifies the need to demonstrate that social and economic benefits outweigh any potential detrimental impacts on the coastal environment. This policy is now significantly out of date and references to sustainable development and the maintenance of environmental quality in SPP1 are relevant. Overall sustainability does not allow for social and economic benefits to outweigh adverse impacts on environmental quality.

1.3.7 NPPG14 Natural Heritage

This document deals with the policy for protection and enhancement of the natural heritage. It sets out the statutory framework for protection, the hierarchy of protected sites and protection in the wider countryside. Of particular interest is Para. 74 which confirms the natural heritage as a material consideration in planning applications and that in some circumstances it may be necessary to refuse applications on natural heritage grounds.

It should be noted however, that NPPG 14 is now out of date and is currently under review, the revised version is due to go out to consultation in the Autumn. In particular the reference to impacts on natural heritage being outweighed by socio-economic considerations is now out of step with the modern policies led by SPP1 in

relation to sustainable development. In summary, meeting sustainability criteria does not allow for social and economic benefits to outweigh adverse impacts on environmental quality.

1.3.8 SPP15 Rural development

The development might meet the policy criterion of a strong rural economy, and SNH is unable to judge this. However, given the high levels of impact on nationally designated natural heritage and wider biodiversity, along with landscape impacts, it is unlikely that the development can be accommodated without adverse impact on environmental quality objectives in relation to setting and design or for protection of important natural heritage.

1.3.9 SPP17 Transport

SPP17 seeks a balance of transport options and increased mode share for non-motorised transport. It states that developments generating significant transport needs should be located to support sustainable travel patterns. Specifically the policy states that planning permission should not be granted for development:

- which would encourage reliance on the private car; and
- where a Transport Assessment does not include any satisfactory mechanism for meeting sustainable transport requirements.

SNH would argue that this development will significantly increase reliance on the private car, both for visitors to the resort and for residents of the housing. The Transport Assessment has not demonstrated how sustainable transport will be achieved, particularly in relation to private car and air travel.

Aberdeen City Council has been carrying out some innovative work on footprinting for transport and this work could usefully be extended here.

1.3.10 Designing Places

Reference should have been made to this policy and its drive for high quality design, in particular in relation to landscape setting and the need for development to fit its landscape in terms of siting, design, scale, materials etc. Designing Places also places high priority on minimising the environmental impact of development, particularly in relation to the use of materials and building orientation.

1.3.11 PAN 43 – Golf Courses and Associated Development

PAN 43 advises on good practice in the design and build of golf courses in Scotland. Menie falls close to an area of search for golf development, though the study that these areas were derived from was completed in 1991. The advice note highlights the risks of developing courses on the coast and the efforts of some clubs to protect elements of their courses through coastal defences. It warns of the impact Tournaments can have on sensitive vegetation and advises that new golf courses should not adversely affect the landscape to an unacceptable degree.

1.3.12 PAN 67 Housing Quality

PAN 67 presents the aspirations for high quality housing and its contribution to successful places. It outlines the urban design toolkit, which includes a series of tools and techniques for considering five key aspects of built form - layout,

landscape, scale and mix, details and maintenance. The toolkit includes development briefs, masterplans, design guides and design statements.

A master plan is defined as "a document that charts the master planning process and explains how a site or series of sites will be developed. It will describe how the proposal will be implemented, and set out the costs, phasing and timing of development. A master plan will usually be prepared by or on behalf of an organisation that owns the site or controls the development process. Master plans will be required for small sensitive sites, such as those in or close to conservation areas, and larger sites within or on the edge of settlements."

SNH considers that a detailed masterplan and/ or a design statement should be used as part of the iterative design process for this site.

1.3.13 PAN 72 Housing in the Countryside

PAN72 advises that new groups of houses should relate to existing groupings and that these are preferable to new isolated developments. The groupings should not be suburban in character. They should be sympathetic in terms of orientation, topography, scale, proportion and materials to other buildings in the locality. They should take account of sustainable development criteria in location and infrastructure needs. Given the lack of information on the housing, it is not clear whether this development conforms with this policy.

1.4 Structure Plan – North East Scotland Together

The assessment of the development against the Structure Plan policies is better and more objective than the assessment against national policies. However, it makes some significant omissions in relation to natural heritage.

The policy assessment states only that the impacts on the natural heritage are addressed elsewhere in the document. However, the sections dealing with natural heritage do not address the policy issue. Therefore it is not clear from the assessment whether the developers consider policies relating to natural heritage to have been met and this is a serious omission of the assessment. SNH would argue that they will not be met due to the significant adverse impacts on nationally protected designated sites and wider biodiversity.

The assessment fails to consider how the development conforms to policies on sport and recreation, and countryside access and open space access. The assessment does not include any consideration of the impacts of climate change on the site.

The assessment argues compliance with the Structure Plan because of a lack of alternatives and through meeting over-riding socio-economic objectives for local communities. SNH does not consider that this assessment provides a complete picture of the relationship to Structure Plan policies.

1.5 Aberdeenshire Local Plan

The assessment of impacts against national designations underplays the degree to which this proposal conflicts with the policies that protect nationally designated sites.

Specifically the assessment fails to note the distinction between the national importance of the designation and the unstated importance of the socio-economic benefits. In the assessment of the coastal policy, the socio-economic benefits are recorded as of local importance. The assessment also appears to contradict other chapters of the ES, for example by concluding that there will be no residual impacts on the natural heritage. The development is likely to conflict with most of the criteria in POL GEN1 on sustainability.

2 Sustainability Assessment

Summary

The sustainability assessment does not provide an objective assessment of the impacts of the development. It assumes that negative impacts on the environment can be outweighed by positive social or economic benefits. The definitions and references used are significantly out of date. SNH disagrees with some aspects of the assessment.

Detailed Comments

A sustainability assessment is not intended to be used to justify negative environmental effects by demonstrating social and economic benefits, as suggested in this assessment. Rather it should objectively assess the impacts of the proposal on all aspects of sustainability and seek to reduce negative impacts and enhance positive ones. It is difficult to envisage a development with significant, long-term negative impacts on environmental, social or economic objectives that could be considered to be overall sustainable at least at the local scale.

The comment in Para 16.1.1, "*It [sustainable development] promotes the pursuit of economic growth in such a way that it does not harm the environment or squander the natural resources on which we depend*" does not conform to current understanding and recent publications on sustainable development. Rather, sustainable development promotes meeting the needs of people, as the definition given indicates, and this need does not necessarily require economic growth. There is increasing attention being given to other measures such as people's quality of life and social and economic well-being.

The most appropriate sustainability objectives reference is the UK Framework for Sustainable Development, *One future-different paths* (2005) which Scotland signed up to and which has a common goal for sustainable development across the UK: "*to enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life without compromising quality of life for future generations*". It also has a set of principles for achieving this goal: 'Living within Environmental Limits' and 'Ensuring a strong, healthy and just society' underpinned by 'Achieving a sustainable economy', 'Promoting good governance' and 'Using sound science responsibly'.

Several references are out of date. A more recent and relevant Strategy is *Choosing our Future: Scotland's Sustainable Development Strategy* published in 2005, whose priorities are:

- Reducing the size of our global footprint (including reducing greenhouse gas emissions);
 - Reducing the size of our global footprint (including reducing greenhouse gas emissions);
 -
- Protecting our natural heritage and resources for the long term.

This and the 2006 '*Changing our Ways*' Climate Change Programme contain the relevant strategic objectives against which this proposed development could be assessed.

The latest set of sustainable development indicators was published earlier this year and can be found at:

<http://www.scotland.gov.uk/Topics/SustainableDevelopment/measuring-progress>.

It recognises the need to look at additional measures of progress: capturing well-being; quality of life; and environmental issues.

The elements mentioned in the consideration of Sustainable Features of a Proposed Development do not address the overall sustainability of the development nor the specific aspects mentioned in the subsequent assessment. SNH would disagree that the development gives priority to “environmental considerations” or that the Masterplan incorporates “biodiversity-enhancing landscaping”.

There is no standard, agreed set of criteria for assessing sustainability at the project scale but we recommend that the chosen criteria are looked at again in relation to whether they adequately cover the objectives of the Scottish Sustainable Development Strategy, in particular in relation to climate change and the need to reduce demand for energy, for example from transport and travel such as air travel. We would recommend making use of recent work done in Aberdeen City on assessing the Ecological Footprint of transport policy options.

The sustainability assessment underestimates some of the key impacts of the development and lacks consistency with other chapters of the environmental assessment. SNH disagrees with some of the conclusions of the assessment, particularly with regard to:

- Landuse – impacts on coastal development, with the mitigation outlined, should be recorded as negative;
- SNH is not convinced that the development will have a positive effect on walking and cycling and this should be recorded as neutral or negative;
- Access and recreation – Parts of the southern section of the site close to the Country Park are used extensively and the development will reduce the opportunities for access and recreation. This should be recorded as a negative rather than positive effect. Positive initiatives for residents and visitors of the development will not mitigate the losses of public access.
- Diversity of wildlife and plants - This section contradicts the ecological assessment contained elsewhere in the ES. There will be significant loss of habitats and relocation and landscaping will not be able to fully mitigate the loss of habitats across the site. The impacts on biodiversity, flora, fauna and habitats should be recorded as negative. The development will also have

adverse impacts on the dynamic geomorphology of the site and this is recognised within the ES. This issue is not addressed by the assessment.

- Use of resources – given the amount of material required for construction of a development of this scale, and the increases in transport and energy use, all these criteria should be recorded as negative.
- Socio-economic – these criteria are not objective assessment criteria, but rather a list of potential social benefits. The assessment does not assess environmental, social and economic impacts and benefits together.

2.3 Conclusion

The sustainability assessment significantly underplays the impacts of the development and appears to contradict the conclusions of other chapters of the Environmental Statement. The study does not present an assessment of the full range of social, economic and environmental benefits and dis-benefits. Therefore it is unable to identify areas of conflict. It does not seek to minimise negative impacts nor to enhance positive effects.

SNH would expect that a major and high-profile development such as this would respond positively to the challenges of sustainability and climate change and actively seek ways to promote excellence in the location, design, construction, management and use of such developments. This approach would be more in keeping with the policies of SPP1 on sustainable development.

APPENDIX 2

SNH Letter to Aberdeenshire Council

12.11.2007



Head of Development Management and Building Standards
Planning and Environmental Services
Aberdeenshire Council
45 Bridge Street
ELLON
AB41 9AA
For the attention of Lesley Aitken

12 November 2007

Your ref: APP/2006/4605

Dear Sir/Madam

**OUTLINE PLANNING PERMISSION FOR GOLF COURSE AND RESORT
DEVELOPMENT
LAND AT MENIE HOUSE, BALMEDIÉ
APPROPRIATE ASSESSMENT INCORPORATING WINTER AND PASSAGE
BIRD SURVEYS 2006-2007**

Thank you for your email of 9 October 2007 requesting comments from Scottish Natural Heritage (SNH) on the above Appropriate Assessment report incorporating winter and passage bird surveys for 2006-2007.

SNH Position

The information in this report is additional to that which was contained within the Environmental Statement. The identification of a pink-footed goose roost and feeding area within the proposed development site is new information of importance to the planning considerations. Pink-footed geese are one of the qualifying species for the nearby Ythan Estuary, Sands of Forvie and Meikle Loch Special Protection Area (SPA) and Ramsar site. There is a high probability of a link between the geese using the proposed development site and those using the SPA and Ramsar site. As the proposed development is likely to affect the geese using the application area, it is also likely to have a significant effect on the SPA under the terms of the Conservation (Natural Habitats &c.) Regulations 1994.

While the current report identifies a likely connection between the two sites with respect to use by pink-footed geese, SNH considers that it is inadequate for carrying out a full appropriate assessment of the likely effects upon the SPA and its conservation objectives. It may be that a full appropriate assessment would be able to ascertain that there would not be an adverse impact on the integrity of the SPA.



This may be because a more detailed study of the use by geese demonstrates that the development site is not critical for their conservation. It could also be because of the consideration of development details not included in this outline application, or because of mitigation actions yet to be identified (or a combination of the three). Unfortunately the current report has not ascertained whether or not this is the case. The report also does not address other potential effects that could arise as the result of a possible increase in recreational pressure. Accordingly, the report is premature in concluding that the development will not have an adverse impact on the integrity of the SPA.

In the light of the above, SNH advises that a more complete appropriate assessment, using additional information and/or analysis would need to be completed in order to come to a valid conclusion as to the absence, or otherwise, of an adverse effect on site integrity. Should the planning authority refuse this application at the outline stage for any reason, including SNH's objection set out in our letter of 30 May 2007, a more detailed appropriate assessment would not be required. If, however, the authority is minded to approve the application at this outline stage, SNH advises that a full appropriate assessment would need to be completed before any subsequent detailed permission could be considered and any full permission granted.

For your information and assistance more detailed comments upon the report and its content are given in the attached appendices.

Please do not hesitate to contact me if you would like to discuss the advice contained within this letter. If it would be helpful, SNH would of course be available to meet with representatives from Aberdeenshire Council and TIGLS (and their agents) to discuss this letter in more detail.

Yours faithfully

A handwritten signature in black ink, appearing to read 'D Bale'.

DR DAVID BALE

Area Manager
Grampian

cc Mr George Sorial, TIGLS
Mr Neil Hobday, TIGLS

Appendix 1

SNH Comments on the Report with respect to the Conservation Objectives for the Ythan Estuary, Sands of Forvie and Meikle Loch Special Protection Area

The comments in this appendix are provided as advice to Aberdeenshire Council with respect to the issues raised by the current appropriate assessment report submitted on behalf of the applicants. Specific comments are contained in Appendix 2.

General Comments

The report appears to assess the proposed development as though the application site had a European designation in its own right. This is incorrect, as Menie itself has no ornithological Natura designation. Instead, in order to meet its purpose, the appropriate assessment of the effects from the TIGLS proposals need to be related to potential impacts on the conservation objectives for the qualifying interests (as set out in Appendix 3) of the nearby Ythan Estuary, Sands of Forvie and Meikle Loch SPA and Ramsar site (hereafter referred to as the Ythan SPA). The present draft appropriate assessment does not do this. Furthermore, in order to be adequate for its purpose, the appropriate assessment should focus on the implications for the nearby European site in view of that site's conservation objectives

The area proposed for development lies approximately 1.5km from the SPA/Ramsar site. In our opinion, the report correctly recognises that some of the bird species associated with the SPA use the proposed development area. This confirms that under the terms of the Regulations there is likely to be a significant effect on the SPA. While the report describes some of the potential effects on these birds while they are roosting and feeding in this area (nearby but outwith the SPA), it does not then go on to describe what these effects mean for the SPA in terms of its conservation objectives. The report is not therefore sufficient to inform an appropriate assessment in this respect. The report also fails to address the impacts on the SPA arising from the potential of greater recreational disturbance that could arise as a result of the increased human population associated with the proposed development.

In order to assist the process, SNH considers that there are 2 key conservation objectives that could be compromised, and these are described below:

1. Population as a viable component of the site.

For this to be compromised, individuals hosted by the Ythan SPA would have to be adversely affected, directly or indirectly, by the loss of habitat and/or disturbance resulting from the Menie development.

The report establishes that a number of species hosted by the Ythan SPA occur in significant numbers on the Menie Estate, in particular pink-footed geese and some of the component species within the waterfowl assemblage (eg lapwing, curlew and golden plover). This suggests a high probability that there is some link between the two sites. SNH considers that this link is most likely to be of importance with respect to pink-footed geese. If such a link does exist, then the question is whether the

development would have an impact on these component species to a degree that would affect one or more of the Ythan SPA conservation objectives. For example, loss of crucial feeding areas or disturbance to feeding birds could have an adverse impact on goose use of the Ythan SPA.

If the TIGLS proposals are developed, SNH agrees with the report that the resultant loss of feeding and roosting area is likely to be small when compared with the much wider area available to pink-footed geese. While this is likely to be the case, it may be that the area at Menie is needed under specific, and possibly critical conditions (eg for nocturnal feeding close to a safe roost site, or during certain weather conditions). The loss of the development area could, therefore, have a significance for the neighbouring Natura site that is well out of proportion with its size. The current report has not ascertained whether or not this is the case. In our opinion, until this is done, it is premature to conclude that site integrity of the Ythan SPA would not be impacted adversely.

2. No significant disturbance of the species.

Increased recreational pressure from local residents and visitors to the proposed resort could potentially lead to an increase in disturbance to species hosted by the SPA. Although this issue is not addressed within this report, it is considered within the 'Response' provided by the applicants in July 2007, in sections 10.6 to 10.7. This anticipates a small number of additional visits (no more than 5 per week) would be generated by the proposed future population of the resort, and concludes that there is not predicted to be a significant increase in visitors to the SPA and a minimal impact on Forvie National Nature Reserve (NNR) as a result of the development.

It is not clear how the predicted figure of no more than 5 additional visits per week to Forvie as a result of birdwatching interests has been derived in the 'Response' dated July 2007. The proposed development comprises 1936 units of accommodation. Based on 2 persons per unit, plus 400 staff, this could equate to over 4000 new temporary or permanent residents in the area. Based on an estimated additional 4000 people, 5 additional visits per week would represent just 0.1% of the additional population visiting the SPA and NNR.

Although good public access provision at Menie could encourage residents to take advantage of the coastal area within easy walking distance, it seems unrealistic not to expect a good proportion of the recreating population to wish to explore nearby areas such as the Ythan estuary and Forvie, on at least an occasional basis. SNH considers that more work needs to be done on calculating the scale, and predicting the patterns, of additional recreational visits arising from the proposed development. This would assist with the assessment of potential impacts, both on the existing infrastructure and interests of the SPA, and with the identification of any necessary monitoring and management measures that could mitigate those potential impacts.

If outline planning permission is granted, SNH advises that the potential recreational impacts should be included within a more detailed appropriate assessment, which would also have to assess any management techniques/measures to mitigate impacts and ensure no adverse impact. This appropriate assessment would have to be undertaken before any detailed permission is considered and agreed.

3. Other Conservation Objectives

SNH considers that the other three conservation objectives are unlikely to be affected by the application.

Appendix 2

Appropriate Assessment Report incorporating Menie Winter and Passage Bird Surveys 2006-2007: SNH Specific Comments

Section 2.1 The SNH guidance is inaccurately summarised at point 5. Point 5 should state that if it cannot be ascertained that there will not be an adverse effect, then the competent authority must only grant planning permission in the absence of alternatives and for imperative reasons of over-riding public interest.

Section 4.2 The waterfowl assemblage is a qualifying feature of which the component species are: lapwing, redshank, common eider and pink-footed goose. These species are listed in 4.2 but it is not made clear that they qualify as a component of the assemblage and not under Article 4.1 or under Article 4.2 as a migratory species (apart from pink-footed goose).

Section 5.3 The overlap between the development and The Foveran Links SSSI and a local SINC are not relevant to inform an appropriate assessment, which must be focussed exclusively on how the relevant Natura site(s) is affected.

Section 5.5 The lack of available detail on the construction and operation of the proposed development may make a valid appropriate assessment difficult to undertake at this time. The current report does not (as outlined above) fulfil the criteria needed for an appropriate assessment.

Section 7.4 It is not clear for pink-footed goose how many counts were undertaken each month and on how many occasions roosting geese were looked for, compared to the number of occasions on which geese were actually present. Table 2 should be clarified in this respect. It is possible that the birds using Menie are from Meikle Loch, and it is possible that use of Menie is integral to the integrity of the SPA, if for example, the roost is used when disturbance at the main roost is occurring or perhaps when birds are engaged in nocturnal feeding. It would be helpful to be clear on whether these birds are part of the roosting population at Meikle Loch, especially since the qualitative information provided in the report suggest that there is a link. The appropriate assessment will need to ascertain that loss of the Menie area will not compromise the pink-footed goose population on the Ythan SPA.

Information for other species indicates a possible link with the SPA for lapwing and possibly curlew and golden plover, but not any other species. No further information is provided which allows an assessment of the impact of the development.

The percentages in **Table 3** can only be calculated with any confidence for species with reasonable numbers.

Section 7.5 The appropriate assessment report appears to have assessed the development site, in terms of whether the site meets international criteria or not. While this information is valuable it is not particularly relevant to the appropriate assessment which relates to the Ythan SPA. Figures for Menie need to be related to numbers hosted by the Ythan SPA, and any impacts identified quantified as a consequence. Furthermore these need to be restricted to the qualifying species (including those mentioned as part of the waterfowl assemblage).

Section 8.1.1-3 The absence of sufficient detail in the planning applications does not allow a full assessment of likely impacts and their significance. Further information on the development is needed before such an assessment can be made.

Section 8.1.4 SNH agrees with the assessment with regard to the proposed Aberdeen Bay Windfarm. However, there is no indication that the Local Planning Authority have been approached to determine what other developments affecting the Ythan SPA have or may contribute to impacts on the site.

Section 8.2 In the absence of sufficient information on impacts, it is hard to see how adequate mitigation can be proposed to address these impacts. In particular possible impacts arising from additional recreational pressure on the Ythan SPA need to be addressed, as well as loss of habitat within Menie for feeding and roosting pink-footed geese.

Section 8.3 This is relevant from the perspective of the development site, but not in terms of impact on the Ythan SPA. The impact assessment criteria used in this section may be of use in generally quantifying the scale of impact on different species in the development area. However, an appropriate assessment must address the effects on the qualifying species in terms of the conservation objectives for the SPA site and the criteria used here do not correspond to the conservation objectives. The conservation objectives must be met in order for site integrity to be maintained. Levels of 'impact significance' are irrelevant unless related to impacts on the conservation objectives of the site.

Section 8.3.2 Comments as above. The table here does not recognise that pink-footed goose is also part of the qualifying assemblage, as well as qualifying in their own right under Article 4.2.

Section 9.0 While the status of pink-footed geese is undoubtedly favourable, the critical issue is the impact of the development on the Ythan SPA, not on the Greenland/Iceland population as a whole. Nor is the number shot relevant. The loss of habitat and any disturbance will be *additional* to the existing pressures on the birds using the SPA. As such this additional pressure must be assessed in the context of the overall SPA population. While loss of feeding area is likely to be small compared the area available to pink-footed geese, it may be that the area is needed under specific conditions (eg for nocturnal feeding close to a safe roost site, or under certain weather conditions). The report has not ascertained that habitat loss will not be significant in terms of the Ythan SPA population, and making the assumption that there are other roost to go to, does not adequately address why the Menie roost is used and how (if at all) this will affect the integrity of the SPA population.

While the Menie roost is clearly not used consistently, this does not undermine the possibility that it may be important *at certain times*. It is for the appropriate assessment to ascertain whether this is the case or not, and the report has not adequately addressed this issue.

Section 10.0 The case has not been made for the conclusions drawn in this section, mainly because the report does not attempt to analyse the implications of the development for the qualifying species of the SPA in terms of the site's conservation

objectives. The conclusion that site integrity will not be adversely affected may or may not be correct, but the information and analysis contained in the report is not adequate to sustain it.

Appendix 3

Conservation Objectives for Ythan Estuary, Sands of Forvie and Meikle Loch Special Protection Area

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- . Population of the species as a viable component of the site
- . Distribution of the species within site
- . Distribution and extent of habitats supporting the species
- . Structure, function and supporting processes of habitats supporting the species
- . No significant disturbance of the species

Qualifying Species: ••••••••

Common tern (*Sterna hirundo*)

Eider (*Somateria mollissima*)*

Lapwing (*Vanellus vanellus*)*

Little tern (*Sterna albifrons*)

Pink-footed goose (*Anser brachyrhynchus*)

Redshank (*Tringa totanus*)*

Sandwich tern (*Sterna sandvicensis*)

Waterfowl assemblage

* indicates assemblage qualifier only

The site overlaps with Sands of Forvie Special Area of Conservation

APPENDIX 3

SNH Letter to DPEA

28.01.2008

**SCOTTISH
NATURAL
HERITAGE**



GRAMPIAN AREA

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Mr J McCulloch
Directorate of Planning and Environmental Appeals
4 The Courtyard
Callendar Business Park
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FALKIRK
FK1 1XR

28 January 2008

Our ref: SIT/SSSI/Foveran Links

Dear Mr McCulloch

**CALL-IN TO CONSIDER TRUMP INTERNATIONAL GOLF LINKS SCOTLAND (TIGLS)
OUTLINE PLANNING APPLICATION ON THE FOVERAN LINKS SITE OF SPECIAL
SCIENTIFIC INTEREST (SSSI), ABERDEENSHIRE**

**YTHAN ESTUARY, SANDS OF FORVIE & MEIKLE LOCH SPECIAL PROTECTION
AREA (SPA)**

I refer to the above call in decision by the Scottish Ministers to determine the outline planning application for the Trump International Golf Links Scotland (TIGLS) and our previous advice to Aberdeenshire Council on the requirements for an appropriate assessment under the Conservation (Natural Habitats &c.) Regulations 1994, as amended (The Habitats Regulations). Please refer to our letter to Aberdeenshire Council dated 12 November 2007, enclosed.

As stated in our letter of 12 November, SNH considers that this proposal is likely to have a significant effect upon the SPA and, as the competent authority, Scottish Ministers, must undertake an appropriate assessment of what is proposed. Consequently, SNH wish to provide updated advice in relation to potential impacts on the SPA.

SNH advice to inform appropriate assessment of the TIGLS outline planning application

SNH was consulted on the 9 October 2007 over a document providing additional information on behalf of the applicants, entitled *Appropriate Assessment Report – Incorporating Menie Winter & Passage Bird Surveys 2006-2007*. The report was dated October 2007 and prepared by Ecos Countryside Services. It contains information that is new and additional to that which is presented in the Environmental Statement and, therefore, could not have been considered when SNH made its original responses to the formal consultation over the outline planning application.

On the basis of the information presented in the report, SNH is unable to conclude that the proposed development would not adversely affect the integrity of the SPA. Subject to the

Area Manager: R. A. Macdonald

Working with the people of Scotland to care for our natural heritage



INVESTOR IN PEOPLE

provisions of Regulation 49, consent should not be granted unless more detailed information is provided by TIGLS to demonstrate that the proposal would not adversely affect the SPA's integrity.

Furthermore, the report assesses the proposed development as though the outline application site itself was designated as a European site. This is factually incorrect. We have identified 2 elements of the SPA's conservation objectives which could be affected by the development:

1. Population as a viable component of the site

The report establishes that a number of species hosted by the SPA occur in significant numbers on the Menie Estate, in particular pink footed geese and some of the component species within the waterfowl assemblage (eg lapwing, curlew and golden plover), indicating a link between the two sites. This link is most likely to be of importance for pink-footed geese. The survey found a regular roost within the application site boundary, with a peak count of 3,500 birds. The site was also used by feeding geese and small numbers occurred on a flight pond. As one of the qualifying features of the nearby SPA is the wintering pink footed geese roost, the development of the TIGLS resort could lead to a loss of a roost which has some importance for the conservation of the population using the SPA itself. SNH advise that further analysis is required to provide greater clarity on the context, understanding and knowledge of what effect these impacts may have with regard to pink-footed geese, as a qualifying interest of the SPA.

Further to the advice provided to the Local Authority, we believe that it is unlikely that further field survey work will be required because it is probable that much of the necessary information is available already. Some is likely to be available from the consultants, over and above what has been presented in their report. In addition, the geese of the North East of Scotland are very well studied by a local, now self employed goose expert, Dr Ian Patterson. We anticipate that the appropriate assessment will be concluded quickly if firstly, the original appropriate assessment report is revised to consider the impacts of the development on this particular component of the SPA's conservation objectives, and secondly more detailed contextual information on the requirements of pink-footed geese, both in this location and more widely in the north-east of Scotland, could be obtained from Dr Patterson.

2. No significant disturbance of the species

Increased recreational pressure from local residents and visitors to the proposed resort could lead to an increase in disturbance to species hosted by the SPA. This issue was not addressed in the report, but was included within a 'Response' provided by the applicants in July 2007 to various aspects of objections.

With the resort being at its closest point 1.5km from the SPA, it is likely that adequate mitigation measures (both on and off site) could be secured to avoid an adverse effect on integrity, but again, before this can be concluded with confidence, further consideration needs to be given. The 'in-combination' effects arising from this development along with other developments in the vicinity of the SPA also need to be considered.

Further work is therefore required in calculating the scale and predicting the patterns and types of increased recreational visits to this site, particularly at the most sensitive times (breeding periods for eiders and terns) and locations (waterborne activities in the Estuary itself, dog walking etc.). We would be happy to help advise on this aspect, particularly given our management role at the Sands of Forvie National Nature Reserve, which forms part of the SPA.

Conclusion

More information is needed for an appropriate assessment. We recommend that the applicants be requested to provide greater detail on the context and knowledge of birds and their interrelationship with the SPA and wider countryside, through re-presentation of existing survey data gathered, and also by obtaining further information from Dr Patterson (we would be able to provide contact details if requested). The applicants should also consider the advice provided in our letter sent to Aberdeenshire Council, particularly the need to focus on conservation objectives of the SPA in order to determine any effects on the integrity of the SPA. If this is done, SNH will be in position to provide appropriate advice to the Scottish Ministers on the potential impacts to the integrity of the Ythan Estuary, Sands of Forvie & Meikle Loch SPA.

If you need any further information in the meantime, please do not hesitate to contact either myself or Sue Lawrence (01224 642863) or Erica Knott (01738 458674).

Yours sincerely



DR DAVID BALE
Area Manager
Grampian

Encs. – Letter to Aberdeenshire Council, 12 November 2007.

cc. Iain McLeod, Scottish Government – Planning Directorate
David Doxford, Scottish Government – Habitats and Wildlife Directorate



APPENDIX 4

SNH Letter to Ironside Farrar

19.03.08



James Miller
Technical Director
Ironsides Farrar
111 McDonald Road
EDINBURGH
EH7 4NW

19 March 2008

Our ref: A160265

Dear Dr Miller

**OUTLINE PLANNING PERMISSION FOR GOLF COURSE AND RESORT
DEVELOPMENT
LAND AT MENIE HOUSE, BALMEDIE
APPROPRIATE ASSESSMENT INCORPORATING WINTER AND PASSAGE
BIRD SURVEYS 2006-2007**

Further to our meeting on 25 February, we enclose some further advice to assist you with the gathering of information and evidence to support an appropriate assessment, to be undertaken for the proposed golf resort development. As you are aware, the applicants are responsible for providing the information required for the assessment, but the formal appropriate assessment will be undertaken by the competent authority. SNH will be advising the competent authority and this information is therefore provided to assist Trump International Golf Links Scotland (TIGLS) fulfil its requirements under Regulation 48(2) of the Conservation (Natural Habitats, &c.) Directive 1994, as raised in our letter of 13 November 2006 and subsequent correspondence. Unfortunately, we were unable to send you this information for 10 March as we originally hoped, as it took us more time to accumulate it than anticipated. We have previously provided advice to assist you with the assessment of the potential effects upon the pink-footed goose population. The advice in this letter is to support the assessment of the likely significant effect arising in relation to the conservation objective to ensure "no significant disturbance of the species".

As you will be aware, Regulation 48(5) requires that a competent authority should (subject to Regulation 49) agree a plan or project only after having ascertained that it will not adversely affect the integrity of the European site. In the matter of disturbance we consider that this can be determined by gaining a justifiable estimate of the additional numbers of recreational visitors to the site and their likely recreational activities; what if any impacts these increased numbers are likely to cause to the qualifying species, and then determining whether the existing or additional management techniques employed at the European site would be sufficient to ensure that there will not be an adverse effect, and if not, to consider what mitigation might be employed to reduce this.

I have attached a draft leaflet that SNH is producing, which is designed for external bodies to explain SNH's approach to casework involving European sites. Please note that this is still draft.

Visitor Numbers

A key part of the assessment is the estimation of additional numbers of people likely to visit the SPA from the proposed development, as well as the location, type and timing of any

increased recreational activity. At our meeting we provided you with a brief document to show why we considered that the TIGLS estimate of 5 additional visits per week to the Ythan estuary, Sands of Forvie and Meikle Loch Special Protection Area (hereafter referred to as the Ythan estuary SPA) was likely to be a significant under-estimate. We have advised in our letters of 14 November 2007 and 28 January 2008, that more work needs to be done to calculate the scale and predict the patterns of additional recreational visits to the Ythan estuary SPA. Having sought advice from specialists in SNH, we have found that there is no widely agreed methodology that can be employed for this process. Accordingly, we appreciate that such predictions will not be easy. We would, however, expect them to be based on realistic estimates using appropriate assumptions from other sources of information. These include a comparison between the likely population of the proposed development (we estimate about 4,000) with existing settlements including Newburgh (according to "Scotland's Census Results Online" this is 1,392) and Ellon (SCROL gives 8,754), and combining this with visitor behaviour information derived from sources such as the Scottish Recreation Survey, Forvie NNR visitor survey, regional visitor/recreation surveys and experience of other golf/housing developments in Scotland.

Impacts of Recreational users

A large part of the Ythan estuary SPA is owned and/or managed by SNH as the Forvie National Nature Reserve (NNR). SNH therefore has a good knowledge of the potential for disturbance from recreational users to the Ythan estuary SPA for various species, and already employs measures to manage these impacts. These are described in Appendix 1.

In addition, we have listed below several other sources of information which may assist you, some of which you may already be familiar with. These include studies from Forvie and also from the Whiteness Head housing and marina development where there was likely to be a significant effect on Whiteness SSSI, the inner Moray Firth SPA/Ramsar and Moray Firth Special Area of Conservation due to disturbance to qualifying interests from access takers. For Whiteness, the Environmental Statement included an access management plan to consider access to the shoreline from land and access to the sea by boat users. There are some clear differences between the proposed developments at Whiteness and Menie. For example, the Whiteness proposal is closer to the natural heritage sites and those sites do not include an NNR which is managed for recreational users. Also, the Menie proposal does not include a marina and therefore boat traffic issues are not of the same relevance. Nonetheless, there are similarities with respect to the principles applied to the assessment. A great deal of work has been carried out to consider the impacts of recreational users at Whiteness and we have only included those documents in the list below, which we consider are likely to be of most use to TIGLS.

1. Forvie NNR Visitor Survey 2002 - 2003

(which was part of NNR baseline visitor survey 2002 -2003)

http://www.snh.org.uk/pdfs/publications/commissioned_reports/F02AA632.pdf

2. Forvie NNR Counter Report 2003 (attached)

Please note that although 5 counters have been placed at Forvie they have generally proved to be unreliable. This report contains the most useful information that we have been able to extrapolate. From this report it is possible to estimate that 6000 people used the Waterside track between 1 April and 31 August (the bird breeding season) in 2003, with half of these visits being at weekends.

3. Forvie NNR : Reserve Management Proposals 2005-2011

This can be downloaded from the following web address.

http://www.nnr-scotland.org.uk/managing_detail.asp?NNRId=27

4. Whiteness Head housing and marina development – Access Management Plan (AMP), revised version of July 2007.

This plan was produced as part of an Environmental Statement to accompany an outline planning application. Although SNH considers there are some short-comings with the plan in its assessment of impact on natural heritage features and identification of specific measures to manage visitors, it provides an example of how current and predicted access usage can be estimated. These predictions were based on an extrapolation from similar attractions in the area.

5. Whiteness Waterbird Report by the British Trust for Ornithology, August 2006.

This report includes a review of current literature, to inform concerns regarding potential disturbance from recreational users.

6. Guidance on Monitoring Access and Recreation at Sensitive Natural Heritage Sites

SNH recently published this report which is available on our website on the link below. You may find it provides useful background information, particularly in the literature review.

http://www.snh.org.uk/publications/online/heritagemanagement/sensitivesites/page_index.asp

7. Forvie tern warden reports from 2004, 2005 and 2007, and SNH Notes on Human Disturbance to Little Tern nest sites at Forvie NNR. (attached)

The tern warden reports contain some incidental reports of disturbance to birds from visitors and these are summarised in 'Notes on Human Disturbance to Little Tern nest sites at Forvie NNR.

We recommend that to obtain copies of the documents listed above relating to the Whiteness development proposal, TIGLS should contact Whiteness Property Company Ltd (WPCL) through Stewart Fulton (tel: 01667 462467/07833 331267). Alternatively you may be able to obtain copies of relevant documents from David Mudie at Highland Council (tel: 01463 702000).

I hope that you find this information useful. It is of course for you to decide how to use the information, and you may wish to use additional material or consider additional impacts, as we do not claim to have been comprehensive. Please do not hesitate to contact either David Bale or I if you wish to discuss this further. As we discussed at our meeting of 25 February, SNH would be happy to comment on a draft approach or draft report if this would be helpful.

Yours sincerely



SUE LAWRENCE

Area Officer

City of Aberdeen and Aberdeenshire Central

cc: DPEA

APPENDIX 1

Ythan Estuary, Sands of Forvie and Meikle Loch SPA

Menie Golf Resort Development: Disturbance from Recreational Users

Existing recreational disturbance at the Ythan SPA

The following are species known to experience existing forms of recreational disturbance at the SPA:

1. Eider duck

Eider duck overwinter on the Ythan estuary which they use for feeding and shelter. They nest close to the blue waymarked route which runs alongside the estuary. The eider population at Forvie is declining, as evidence from both winter and breeding surveys shows. Likely causes are a reduction in food supply; disturbance to birds on the nest from walkers/runners and dogs not on the lead; and disturbance to crèches of ducklings on or by the Ythan estuary, either by dogs not on the lead (crèches by the estuary), or from watersports such as windsurfers disturbing crèches of ducklings on the water or crashing on land close to crèches. Disturbance of birds on the nest can cause birds to temporarily leave the nest resulting in increased rate of predation. Disturbance of crèches of ducklings can separate the crèche and result in increased predation.

2. Terns

The breeding terns occur close to the north side of the estuary mouth, both within the dunes and on the upper shore. Little terns nest in 2-4 areas that change year to year according to local conditions. Common terns nest in a separate area in a dispersed pattern, whereas sandwich terns also nest in a separate area but as a single colony. Breeding terns, predominantly Little, and to a lesser extent Common, can be disturbed by anglers fishing on the estuary walking close to their nesting area. In places, the area for anglers to travel is narrow, leaving little leeway for anglers to avoid the nesting area. Dogs and walkers can also cause disturbance to nesting birds. Windsurfers approaching close to the nesting area can cause terns to leave the nest, resulting in increased predation and permanent desertion of nests.

3. Overwintering wader and wildfowl

Overwintering wader and wildfowl generally feed and/or roost on the mudflats when the tide is out. When the tide is in, they will roost on nearby areas such as saltmarsh above the high water mark. These can be disturbed by walkers and runners, especially by those with dogs off the lead. In cold weather, the increased energy costs of disturbance could potentially affect wader and wildfowl survival rates. Roosts occur both downstream and upstream of the road bridge and while some areas are readily accessible to visitors, those upstream are more difficult to reach and less prone to disturbance.

Wildfowling currently occurs and the impacts on the SPA features are not known.

Impact of the proposed development

It is likely that if the golf resort development is built, it would lead to an increase in visitors, both with and without dogs, to the Ythan SPA and Forvie NNR. It could also lead to an increase in watersports and wildfowling. As a result, the existing effects identified above could increase in occurrence and the significance would depend upon the magnitude of the increase in visitor numbers.

There is no known existing disturbance to geese roosting at Meikle loch, other than through wildfowling. Wildfowling around the loch is likely to cease in the near future due to a change in ownership. SNH considers that it is not likely that disturbance to the geese at Meikle loch would increase as a result of the proposed development.

Measures to reduce recreational disturbance

Forvie NNR is owned and managed by SNH and forms the main part of the Ythan SPA (excluding Meikle Loch). As an NNR, SNH's aims include promoting recreation to raise awareness of the environment. The potential forms of recreational disturbance outlined above are all existing issues that SNH has either already, or is in the process of, taking steps to remedy as follows:

Walkers/runners	Signs on the reserve inform visitors of the need to keep dogs on the lead. Fencing keeps people and dogs out of the tern nesting area. SNH will consider whether it is feasible to extend the fencing around the eider breeding area. A tern warden is employed during weekends in the breeding season to advise the public on the need to avoid the tern nesting area.
Anglers	SNH has considered in the past whether to erect a screen between gaps in the dunes overlooking the lower beats used by the anglers on the estuary, next to the preferred little tern nesting area. In 2007 the little terns moved their preferred nesting area to pebbles on the shore of the estuary, an area which is in plain sight of anglers. As such, increased communication and awareness in the ghillies was necessary to reduce disturbance. This worked well and anglers caused little disturbance to terns in 2007. The SNH 'Advice to Anglers' leaflet was revised in 2007 to show the location of the terneries more clearly to visiting anglers. However, in 2008 this preferred site is no longer suitable as a result of sand being blown onto the shingle. It is not yet known where the littler terns will nest this year, and SNH will again consider a screen if appropriate.
Windsurfers	If disturbance from windsurfers is perceived by SNH as requiring control, SNH could introduce access guidance for windsurfers and if necessary, bylaws.
Non-motorised boats	If disturbance from non-motorised boats is perceived by SNH as requiring control, SNH could introduce access guidance and if necessary, bylaws.
Jet skiiers/motorised boats	At present there are no jet skiiers in the estuary. Anglers use motorised boats for fishing at high tide. Anglers have agreed to a voluntary 5 knot speed restriction, in part to benefit other anglers. If disturbance from motorised boats is perceived by SNH as requiring control, SNH could introduce bylaws.
Wildfowling	SNH is currently working on a voluntary code of conduct for wildfowling at the Ythan estuary.

APPENDIX 5

SNH Letter to Ironside Farrar

29.04.08

**SCOTTISH
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James Millar
Ironsides Farrer
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Your Ref:
Our Ref: Menie TIGLSPLI

29th April 2008

Dear James

**Trump International Golf Links Scotland (TIGLS)
Information to inform an Appropriate Assessment Draft Report**

Thank you for forwarding to SNH the draft report containing information relating to the appropriate assessment. We have reviewed this part of the draft which relates to impacts on pink footed geese and can offer comments which I hope will assist in the completion of the report.

Our comments are contained as an annex to this letter and are based on our current understanding of the development as proposed within the outline application. Further comments in relation to the issues surrounding the recreational impacts and potential disturbance will be with you once we have had a chance to review that section of the report in detail.

Please do not hesitate to contact me, if there are any points of clarification you require once you have had a chance to review our comments.

Yours sincerely

Erica Knott
Policy and Advice Manager, Casework Support

Enclosure

Cc Mr Colin Bell, DPEA

Chairman: Andrew Thin

Chief Executive: Ian Jardine

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Comments on the Draft Report: Information to Inform an Appropriate Assessment, April 2008.

Ythan Estuary, Sands of Forvie and Meikle Loch Special Protection Area (SPA), Qualifying interest – pink footed geese

General

SNH welcomes that the baseline information used to inform this draft report has followed that advised by SNH at the meeting on 25th February. This has included obtaining information from:

- Grampian Ringing Group
- Interviews with the former Menie Estate gamekeeper.
- Completion of dawn roost counts

There is some additional information which could be obtained to provide a greater context for the appraisal of impacts e.g.

- Numbers, trends and distribution of the Icelandic pink-footed goose population, particularly in NE Scotland. This information is available through the Wildfowl and Wetlands Trust (WWT) website. This would provide a better contextual picture of Icelandic pink footed geese in North East Scotland, than currently provided in the report.
- The report refers to various sets of data, some unpublished by Ian Patterson, and some from published papers (Patterson and Hearn 2006; and Patterson and Thorpe, 2007). In order to make it easier to follow the line of argument in the text, it would be useful to present **all** the relevant supporting data from these sources in the report. At present the readers would need to find these reports and decide for themselves what was and was not relevant. The unpublished data are not, by definition, available to be found by anyone other than the author.

The current analysis clearly demonstrates that the proposed development area is important periodically to pink footed geese as both a roost and feeding area, based on numbers recorded and the proportion of the population of the SPA using the site. There is also strong evidence in section 4.4 that the birds using the Menie area are indeed part of the larger population using the SPA. As the proposed development could affect the use of the area by the geese, it is correct to decide that the application is likely to have a significant effect on the qualifying interests of the SPA, and that an appropriate assessment is required. There is also no doubt that wintering geese in the north-east and Scotland are both mobile and have a large resource available, including alternative feeding areas and roosting sites.

Legislative Context

We would suggest that section 1.3 is redrafted to reflect all the changes to the Regulations and should therefore be cited as follows:

The Conservation (Natural Habitats, &c.) Regulations 1994 as amended, (the Habitats Regulations).

Paragraph 2.3 currently only infers the requirements of regulation 48. It currently reads that the need for appropriate assessment is required only for 'the interest protected within the site'. This should be amended to reflect the requirement to consider the "qualifying interests" of the site, which can be both within and/or outwith the site boundary. It should also be noted that this appraisal should also take into account the judgment reached in the Waddenzee ECJ judgement [C-127/02] which referred to the need for the judgment to be reached to be beyond reasonable scientific doubt.

Section 3.1 could be misinterpreted, a change to the wording is recommended to aid clarity e.g. "The qualifying interests are those that the Scottish Ministers classified the site to protect and SNH, with the endorsement of the Scottish Government, produce the conservation objectives. Competent authorities are required to assess the plan or project against the qualifying interests and their conservation objectives, to inform an appropriate assessment."

In section 4.6, last sentence, a change of the wording is required to reflect the precise requirements of the Regulations, in determining whether or not there is an adverse effect on integrity, rather than as currently stated a negligible impact on the integrity.

Adequacy of data

The variability in the count data presented is clearly evident in the roost counts as well as the day time counts at Menie and also in the roost counts on the Ythan and Meikle Loch SPA. Geese are a highly mobile species and even within and between years, patterns of distribution can be markedly different. The use of medians rather than means is helpful, particularly as the data are so skewed with high and low counts.

The data collected identify that on occasions (three out of eight in 2006/07) the number of geese using Menie as a roost site is significant (with greater than 1% of the population of the SPA recorded) and the use of the area for feeding is likewise consistent and occasionally significant, in terms of overall numbers. It is also apparent that feeding at Menie is not particularly predictable and could reflect the vagaries of field use, which will be dependent on food availability and feeding preferences at any particular time during the season.

Please note corrections are required to Table 2, with the mean number of geese observed for the whole period being 310 and the median for the whole period is 62.

Appraisal

SNH's advice is that this proposal is likely to have a significant effect on the pink footed geese and that an appropriate assessment in line with regulation 48 is required. We have also advised that the conservation objectives that are of most relevance to this case are those that connected with maintenance of the population and disturbance. With respect to the population of geese, an adverse effect on the integrity of the site would occur through the loss of birds using the SPA, which could be caused as the result of the loss of feeding and / or roosting availability.

In the light of the evidence presented in the draft report, we have a reasonable expectation that we will be able to conclude that there would be no adverse effect on site integrity. However, in order to be able to do so beyond reasonable scientific doubt, SNH advises that there is a need to provide additional contextual evidence. Much of this already referred to in general terms in the current report, but in order to assist the final conclusion, SNH advises that the supporting data needs to be presented more explicitly. The specific requirements are set out below with respect to the feeding and roosting requirements. Once these additional amendments are made, it should be possible to verify (or otherwise) beyond reasonable scientific doubt, the provisional findings set out in section 4.6.

Feeding

The counts for feeding/loafing geese during the 2006/07 are presented in paragraph 4.3.1 and Table 4.1 without any description of the methods used. For how long during each day, or between what times were they counted? Was this consistent for each count date? From where and how were they observed? The method is needed to indicate reliability of results.

Paragraph 4.5.1 compares feeding numbers at Menie for October and November 2006 with unpublished roost counts at Meikle Loch for the same period. These unpublished data are attributed to Ian Patterson, so it would be useful if he could present his SPA counts for sake of

clarity. By contrast, the feeding counts at Menie for March and April 2007 are compared with SPA roost counts for a different year, 2008. This presents statistical problems for the direct comparison. Would it be possible to compare the Menie feeding counts for March/April 2007 with SPA roost counts for the same period? Ian Patterson may again have these. This would help to clarify the relative numbers of birds using Menie for feeding, with those using the SPA for roosting.

The draft report recognises that pink footed geese range widely from their main roost sites to feed and the choice of feeding locations will change during the course of a day and on a daily basis. The radio tracking data from the late 1980s are helpful in demonstrating a lot of mobility for individual geese whilst feeding, but do not give any clear indication of the size and geographical extent of the feeding range that is available to geese using the Ythan SPA. It would be useful to present wider contextual data so that we can determine the significance of the Menie feeding area in comparison with the scale of the resource available throughout the wider range of feeding sites. We believe this information is likely to be available from Ian Patterson, although it may be unpublished.

Given that the radio tracking data were collected during the 1980s, additional consideration should be given to whether or not there is still the same flexibility in the availability of alternative feeding areas within this locale, given that there is likely to have been changes in land use in the intervening period.

Together this additional information will allow a more certain conclusion to be reached with respect to effect on integrity arising from potential loss of the Menie feeding area.

Roosting

Section 4.2 confirms that a goose roost has been established at Menie since at least 1999. This indicates that the record of a roost in the draft report is not a one-off occurrence. The information from the keeper also states that geese roosted both on the field and the Blairton pond. The description of the roost in 2006/07 does not record whether the geese were roosting on the field as well as the pond, whereas for 2008 it is reported that all the roosting geese were on the pond. Can the use in 2006/07 be clarified? If the geese appear to have stopped using the field for roosting can we gain any indication as to why this might be?

The goose roost counts for 2006/07 (Table 4.3) record a variable presence on the site, with none being seen on 5 out of 8 occasions. The presentation of statistical averages is appropriate here, although the very small sample sizes and occurrence of zeros does lend problems with respect to statistical reliability of those means, especially when presented seasonally. The limits of the data should be set out more clearly, especially when comparing the Menie data with roost counts for the SPA (section 4.5.2). Since geese coming into Menie at dusk during 2006/07 were counted in October, January and February, would it not be useful to compare the numbers at Menie with those using the SPA over that period? Also, while no geese were counted at Menie during March and April 2007 (although only one count in each month), it would still be useful to present roost count data for the SPA for the same period to see what was happening there.

It is also interesting to compare the data for 2007 with those for 2008. During 2007, there were no birds counted at the roost on the March and April count dates (Table 4.3), whereas for 2008, Table 4.4, geese were counted on all four dates in March and April. An assessment of this apparent between year variability (albeit based on very small data runs) would be useful, as well as seeing if it correlates with any weather or other environmental data collected at the time. What do the findings for the Menie roost in 2008 tell us about the findings (or frequency of counts) in 2007?

Menie is used as a satellite roosting area, and as stated within the report, the potential loss of a roost site is a more unusual occurrence. The report refers to other satellite roosts in the vicinity of the SPA. It would be valuable to present more precise information on where these are, and any available data /evidence as to the levels and variability of usage. This would again set the Menie roost into its wider context.

The report, section 4.4, also refers to a major change in use of the main SPA roosts during the course of the season, with geese moving from the Meikle Loch to the Ythan estuary after the end of the shooting season. It would be useful to present the available data supporting this statement more precisely to give an indication of the magnitude of shift. The level of use of the Menie roost, and its variability can then be compared with that within the SPA and the other satellite roosts. It appears from the report that Ian Patterson again has the necessary data. This is again important contextual information.

The SPA population of pink footed geese is not static throughout the season. There appears to be a constant turnover, with geese moving to other roosts in the north east and also parts of the country. Again, it would be useful to compare the data for Menie with contextual data on the population levels at the SPA over the last 10 years, and during each year, and also for Scotland and the UK (which can be gained from the WWT web site mentioned in the "General" section above).

The longer series of data for the SPA would indicate population trends in the usage of the site, but also indicate the apparent capacity of the SPA to accommodate roosting geese, and whether or not this is at its limit (hence the possibility that geese are using satellite roosts such as Menie as an overspill). The wider population data would indicate the larger scale mobility of the geese to allow the behaviour of the Menie population to be put into context. With this information it would be possible beyond reasonable scientific doubt to conclude whether or not the loss of the roost site at Menie, would be likely to cause the geese to relocate, or to be lost to the SPA population.

Mitigation including offset mitigation

Currently mitigation and offset mitigation is proposed within the report and includes:

- Provision of feeding fields
- A buffer zone around the flighting pond, although SNH advises that the use of screening shrubs or hedging is likely to deter geese rather than be a positive measure
- Creation of an additional roost pool outside the development area.

SNH welcomes the provision of these measures, and agrees with the statement in section 4.7 that these measures would "avoid any possibility of an impact and also preserve the amenity of wild geese feeding and roosting close to the development". We note however, that little detail is currently provided with regard to the proposed areas or location for the feeding fields and roost pool etc., or how, or if, these mitigating initiatives would be implemented within the development in practice.

Cumulative Impacts

We have previously advised that this project needs also to take into account other plans or projects which could have an impact on pink footed geese, as a qualifying interest of the SPA. In particular, we had advised that consideration should be given to the potential impacts from the proposed Aberdeen Bay offshore windfarm, however as you have now informed us that this information is still only raw data with no analysis and as the plans for this windfarm are currently under review, we consider that this plan is deleted from the list of plans and projects to be considered.

APPENDIX 6

SNH Letter to Ironside Farrar

02.05.08



James Millar
Ironsides Farrer
111 McDonald Road
Edinburgh
EH7 4 NW

Your Ref:
Our Ref: Menie TIGLS PLI

2nd May 2008

Dear James

**Trump International Golf Links Scotland (TIGLS)
Information to inform an Appropriate Assessment Draft Report**

Thank you for forwarding to SNH the complete draft report containing information relating to the appropriate assessment. We have reviewed section 5 of the draft, relating to recreational disturbance and our comments, based on our current understanding of the development as proposed within the outline application, are contained in an annex to this letter. Together with our earlier comments on sections 1-4, (sent 29th April), I hope these will assist you in the completion of the report.

Please do not hesitate to contact me, if there are any points of clarification you require once you have had a chance to review our comments.

Yours sincerely

Erica Knott
Policy and Advice Manager, Casework Support

Enclosure

cc Mr Colin Bell, DPEA



Comments on the Draft Report: Information to Inform an Appropriate Assessment, April 2008.

**Ythan Estuary, Sands of Forvie and Meikle Loch Special Protection Area (SPA)
Disturbance from Recreational Activities**

General

SNH broadly welcomes the approach used to estimate the additional number of visitors to the Ythan Estuary, Sands of Forvie and Meikle Loch Special Protection Area (Ythan Estuary SPA) that would arise from the proposed development, but considers the method does not clearly demonstrate some of the calculations to identify the predicted volume of visits.

The current analysis attempts to identify the scale of increase in the number of visitors to the SPA arising as an indirect result of the development. Given that recreational disturbance is already known to have some impact on some of the qualifying species for the SPA, and that the development would result in an increase in the numbers of visitors, the decision that there is likely to be a significant effect upon the site from the potential for increased disturbance is justified. An appropriate assessment is required accordingly.

At this stage it cannot be said beyond reasonable scientific doubt that the level of recreational access (with or without mitigation) will not have an adverse effect on site integrity. We believe that it is probable that this conclusion will be able to be reached. Before we can determine whether or not this expectation is correct, further clarification is required regarding the assumptions and calculation methods underpinning the estimation of the likely additional numbers of visitors. This estimate is then crucial in the assessment of the potential impacts to the SPA and the likely effectiveness of the existing/proposed management techniques. These requirements are set out in more detail below.

Methodology

Section 5 Calculation of visitor numbers

We believe the most critical part of this assessment is the calculation of the likely increase in the numbers of people visiting the site over a year as a whole and during sensitive seasons in particular. From this it can then be determined whether or not existing and additional management of the various activities that would be enjoyed by the additional visitors would be adequate to prevent an adverse effect on the breeding and wintering bird interests of the SPA.

The estimate of permanent and temporary residents at TIGLS seems to be based on reasonable assumptions, although it is surprising that there is so little difference between the summer and winter numbers.

Unfortunately at present it is very difficult to follow the series of calculations in a logical line of argument and to have confidence in the total presented in section 5.7.6. This figure also seems to be at odds with that given in section 5.8. It is of course impossible to be totally confident in any figure produced as there are so many variables (as pointed out in section 5.8.7). It should, however, be possible to be able to follow the reasoning and have confidence in the calculated order of magnitude.

This order of magnitude for the year as a whole and for sensitive seasons can then be compared with the data on existing visitor usage, and the existing management issues. Accordingly, we would ask that you look again at the presentation of the calculations and make it much easier to follow the connections between the various steps from the numbers of residents / temporary visitors to the total. With increased clarity we will have more confidence in reasonably expecting to be able to determine whether or not your conclusion on numbers and adverse effect is reasonable.

Additional Specific Comments

Section 5.7

It is not clear how the assessment has used the population figures from existing settlements in the locality of the SPA to inform the assessment process (1st bullet point under assumptions – 5.7.1). These should provide a useful part of the context for the existing numbers using the SPA and the likely additional numbers from the proposed new settlement.

There is an arithmetical problem in bullet point in section 5.7.3

With respect to the first and second bullet points in section 5.7.3, concerning frequency of visits to the outdoors, it is unclear why you have based the calculations solely on the 56% (35% summer & 21% winter) of people who participate at least several times a week in outdoor recreation. It is also unclear how this has been used to estimate the number of visitors over a 4 week period and during the winter and summer seasons. This approach disregards those who visit weekly or less frequently (63% of the respondents) and is, therefore, likely to underestimate the volume of visits. We also advise that the calculation of visitors during a 4 week period should take account of additional information from the Scottish Recreation Survey 2005 report, which indicates that the proportions reporting taking visits during the previous 4 weeks in each quarter of the year varied as follows: 67% in January-March, 60% in April-June, 63% in July-September, 55% in October-December. Furthermore the mean number of visits taken in a 4-week period by those who took any visits was 9.3. Across the year as a whole, 75% of adults took at least one visit to the outdoors for leisure and recreation and the mean number of outdoor visits per week by those who took any visits was 2.34.

Section 5.8

It is not clear where the figure of 1466 additional visitors comes from.

Section 5.9

This section is reasonable in its approach, but the adequacy of its conclusions does depend on whether or not we can increase our confidence in the calculation of additional visitors.

As a matter of fact, the eiders breed in a different location from the terns (section 5.9.3) and are not fully protected by electric fencing – there is however the option to increase the level of protection from visitors and dogs.

Section 5.10

The mitigation measures on and off site all appear reasonable, provided, again that the calculations on the order of magnitude of additional visitors can be justified by clearer presentation. If the justification for the figures is clearer then we have a reasonable expectation that there will not be an adverse effect on site integrity.

APPENDIX 7

Forvie NNR Leaflet

'Thystle, Bente and Sande'



Rockend

Little circular foundations, most now buried by sand, were part of this use. It continued with kerb cairns, which local people built about 3000 years ago, to cover their cremation burial sites. Three of these cairns lie on land that had previously been farmed.

Later evidence comes from the time when people began farming and burying their dead, about 5000 years ago.

Kerb cairn



According to local legend, the village was overwhelmed when three sisters placed a curse on it. They're said to have been cast adrift in a leaky boat to deny them their inheritance. In a fit of rage, they screamed: "Let nocht be funde in Furrye's gledes / Bot thysl, bente and sande." When the sisters eventually reached dry land the curse whipped up a storm that continued for nine days and nights. By the time it ended sand had buried the village.



Forvie Kirk

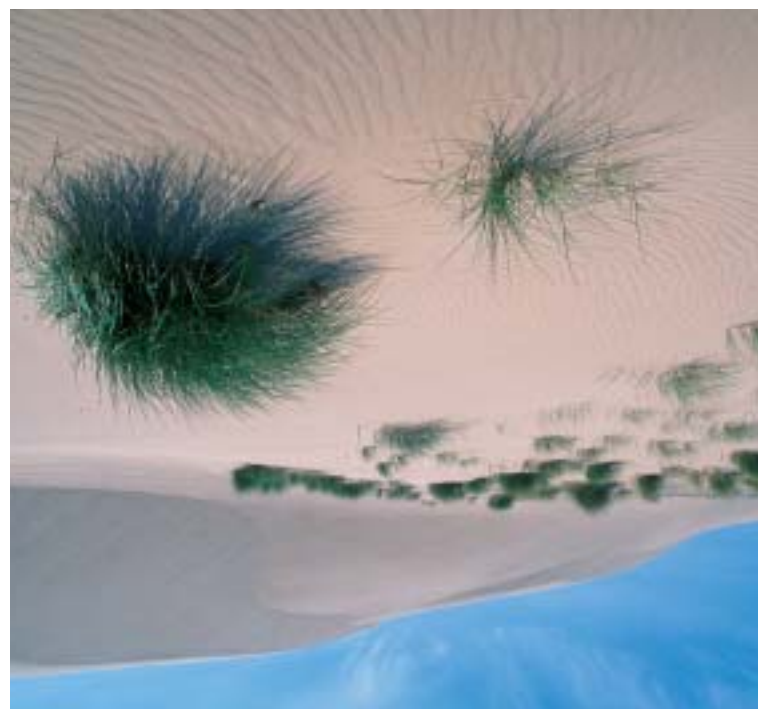
Near the salmon fishing station at Rockend are the remains of a medieval settlement. You can still see the ruins of Forvie's 12th century kirk, which was built on the site of a previous chapel that possibly dated back to the 8th century. The whole settlement had disappeared under sand by the 15th century.

Forvie's curse

Huge spreads of sand were dumped by glaciers in the area, at the end of the last ice age, some 15,000 years ago. Through time sea levels fell and exposed the sand. Later, gusting coastal winds blew it inland, much as you see today on a smaller scale at low tide.

Northern Sahara

Sand and marram grass



Shifting dunes



The earliest dunes formed in the south of Forvie 2000 years ago. Gradually, the sand moved north to reach Collieston by 1700. Eventually, it stabilised and is now one of the largest untouched dune systems in Britain. Wander in the southern dunes today and it's easy to imagine yourself somewhere like the Sahara - just don't expect many heat waves here!

The dune system you now see at Forvie acts as a blanket, covering an older landscape beneath shaped by our ancestors. People lived on Forvie from the earliest times because it provided many sources of food. The earliest evidence of settlement dates from 8000 years ago and consists of small fragments of flint scattered during tool-making.

Ancient leftovers

Forvie

NATIONAL NATURE RESERVE



The towering sand dunes of Forvie National Nature Reserve are a vivid reminder of the power of natural forces. Until the Middle Ages much of the ground here was farmed. However, advancing sands forced the community to retreat and leave the land they had struggled for centuries to tame.

Today, plants and animals are the residents of Forvie, but people come here for a different purpose. Here you can admire the haunting beauty of a truly wild landscape with a spectacular wealth of wildlife.



Getting to Forvie

Forvie NNR lies 16 miles (26 kms) north of Aberdeen, through Newburgh off the A975. Aberdeen-Peterhead (via Cruden Bay) buses stop by request at Collieston road end, and then it's a 20 minute walk to the visitor centre. Alternatively, it's a 15 minute walk from Newburgh to the Ythan Estuary.

Scotland's natural heritage is a local, national and global asset. SNH promotes its care and improvement, its responsible enjoyment, its greater understanding and appreciation, and its sustainable use, now and for future generations.



For more information, please contact:
 Scottish Natural Heritage,
 Little Collieston Croft,
 Collieston, Aberdeenshire, AB41 8RU
 Tel/Fax: 01358 751330

Front cover photos: dark green fritillary butterfly on spear thistle, male eider duck and aerial view of Forvie NNR and Ythan Estuary

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Forvie

National Nature Reserve



'Thystl, bente and sande'





Male eider

Colour splash

Forvie hosts a huge range of flowering plants. The sea cliffs between Rockend and Collieston dazzle with colour when pink flowered thrift, sea campion, kidney vetch and purple northern marsh-orchid come into bloom. The cliffs face east and have a top layer of red boulder clay, providing ideal conditions for plants like cowslips, primroses, the insect eating butterwort and delicate grass-of-Parnassus.

Visit Forvie in August and you'll find a vast swathe of purple carpeting the dunes. This coastal heath is one of the finest of its kind in Britain.

Look out for the bright green leaves of crowberry with its black berries and the grey-green lichens mottling the moor. The heath can look almost black when it's not flowering and visitors sometimes think there's been a huge fire. But look closely and you'll find colourful plants on the moor, such as yellow tormentil and purple heath milkwort.



Northern marsh-orchid



Forvie's plants support a mass of insects, including butterflies and moths that depend on the plants for nectar and food for their caterpillars.

The green-veined white and the small heath are the commonest butterflies over most of the reserve. You may also see the dark green fritillary in late summer feeding on thistles or basking in the sun. Look out for the day-flying six-spot burnet moths, with their striking black and red markings, on the cliff-top paths during early summer.

Ducking and diving

One of the sounds commonly associated with the reserve is the owl-like 'woo-ing' of eider ducks. Forvie is home to the country's largest population of breeding eiders, with some 5000 gathering in summer to nest among the heather or long grass. The females incubate the eggs in a nest lined with eider down - guaranteed to keep them warm!

The best place to see the birds is the lower Ythan estuary where you can watch them diving for

mussels. They swallow the mussels whole and grind the shell down into small pieces. Only about 1000 eiders remain on the reserve year round, while the rest head south to overwinter on the Tay Estuary.



Wigeon



Green-veined white butterflies on cuckoo flower

Exploring Forvie

Visit the reserve any time of year and you'll find plenty of interest. One of the best ways to see the site is to follow one of the three waymarked trails. SNH staff may be able to offer a guided visit if you're coming as part of a group. You can find out more about the reserve by visiting the Stevenson Forvie Centre (open daily April to October - other times by arrangement), at the north of the site, which houses a display on the reserve.

Please remember that Forvie's plants and animals are used to the harsh conditions here, but they can't cope with the changes that people create. Give wildlife a fighting chance by making sure you don't trample on plants or start fires. You should also note that the southern part of the site is closed to the public from April to August each year to protect the breeding terns.

Finally, dogs must be kept on leads while on the reserve all year round.

Feathered fuel stop

The estuary's mud flats are home to a wealth of marine life - just one square metre can hold over 10,000 tiny worms, shrimps and snails! These mini creatures provide a fast food outlet for birds, many of whom stop at Forvie to refuel on their long journeys south for winter or north for summer. Wintering wildfowl also spend part of the year here, with more than 20,000 geese gathering near the estuary and feeding on neighbouring farmland.

Among Forvie's special summer visitors are four species of tern - sandwich, common, arctic and little tern - that breed on the pebbles and small dunes in the south of the reserve. You can watch the rhythmic flight and spectacular diving of these elegant birds at the estuary. Listen out for the 'splish' as they plunge-dive into the water to catch sand eels and other small fish. The arctic tern travels some 20,000 miles from the Antarctic to breed here - a long way for an unpredictable Scottish summer!



Arctic tern



School visit



Cross-leaved heath