

Practice Note

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White-tailed eagles (sea eagles) were re-introduced to Scotland from the 1970s and there are now over 50 breeding pairs. They frequently nest and roost in woodlands and tend to use habitual nest sites. The species has a high degree of legal protection, and woodland managers need to plan operations carefully to avoid disturbing the birds or damaging their nests. During the breeding season, between 1 February and 31 August, most forestry operations and activities should be avoided or severely restricted within 250 m of an active nest. Depending on circumstances, it may be possible to carry out a range of management and recreational activities between 250 m and 500 m from an active nest without risk of disturbance. At other times, activities up to and around nest sites may normally be carried out with little risk of disturbance, although habitually-used nests themselves are protected from damage and destruction, even when not in use. At any time, birds should be protected from repeated disturbance (harassment), for example at roost sites, as this is also an offence.

FCPN101 1

Introduction

This practice note provides advice to forest managers and landowners to help them to plan and carry out forestry operations and other activities in relation to the statutory protection of white-tailed eagles (sea eagles). It replaces general guidance relating to white-tailed eagles contained in *Forestry Operations and Birds* (Forestry Commission Scotland guidance note 32).

Forestry Commission Scotland will follow this practice note when managing the national forest estate and will also expect it to be followed as a condition of felling licences, grant aid and forest plans for private forests.

The note was produced taking into account scientific knowledge and experience gained in Scotland and other countries (summarised in Ruddock, M. and Whitfield, D.P., 2007). However, our knowledge of how white-tailed eagles react to forest management in Scotland is still developing. The range and population of white-tailed eagles is increasing and their use of forests and responses to forest operations may change in the future. We will keep the practice note under review to ensure it is kept up to date and continues to help forest managers to achieve a balance of species protection and practical woodland management.

The Scottish Rural Development Programme may be able to provide support for elements of the management planning recommended in this note, for example through grants for long-term forest plans and various types of Woodland Improvement Grant.

Background to conservation status

The white-tailed eagle is a rare species in Scotland with 52 breeding pairs in 2010. In Scotland, white-tailed eagles often nest and roost in trees, both in forests and in small woodlands

White-tailed eagles and the law

White-tailed eagles and their nests have the highest levels of protection. They are protected by the Wildlife and Countryside Act (W&CA) (1981), as amended by the Nature Conservation (Scotland) Act 2004. They are listed on Schedules 1, 1A and A1 of the Wildlife and Countryside Act which makes it an offence to *intentionally* or *recklessly*:

- kill, injure or take a white-tailed eagle;
- damage, destroy, obstruct, or interfere with a nest, whilst it is being built or is in use, or with their eggs and young;

Box 1 - Key points

- White-tailed eagles (sea eagles) have a high degree of legal protection. This practice note describes reasonable measures that forest and woodland managers should take to avoid the risk of breaking wildlife law during the course of managing forests.
- This practice note replaces existing guidance relevant to white-tailed eagles and should be regarded as the definitive guidance for Scottish forests and woodlands.
- Within 250 m of an active white-tailed eagle nest, most forestry operations and activities should be avoided or severely restricted during the breeding season, 1 February to 31 August, to avoid disturbance.
- Between 250 m and 500 m of an active white-tailed eagle nest, depending on local circumstances, some forestry operations and activities may be carried out between 1 February and 31 August without risk of disturbing the nest.
- From 1 September to 31 January, forestry operations and activities up to and around whitetailed eagle nests may be carried out with little risk of disturbing white-tailed eagles, (unless eagles are actively nest-building which sometimes happens in December and January).
- Roost sites should be protected from repeated disturbance. To avoid this, forestry activities or recreational events within 250 m of an active roost site should be avoided during the period from two hours before sunset until two hours after sunrise, at any time of year.
- Habitually-used nest sites are protected from damage and destruction even when not in use.
 Foresters should plan operations carefully to avoid damaging or destroying such nests.
- Forest managers should document the precautions that they have taken. For active nests it is a good idea to develop a site-specific nest management plan, in consultation with local SNH staff.

- disturb a white-tailed eagle while it is building a nest or is on or near a nest containing eggs or dependent young;
- harass a white-tailed eagle at any time. This includes birds away from their nests and outside the breeding season;
- damage, destroy or otherwise interfere with a habitually-used nest of a white-tailed eagle, even when it is not in use.

Anyone who carries out, or knowingly cause or permits any of the above acts could be committing an offence.

What are the risks for forest managers?

The main potential offences of relevance to forest managers relate to:

- disturbance or harassment of the birds, especially those at nest sites in the breeding season or at roost sites, as a result of forest management operations or recreational activities.
- damage to nests (whether active or inactive) as trees are felled during forest management.

To avoid the risk of committing an offence, the most straightforward options are normally:

- to avoid potentially disturbing operations and activities near to a white-tailed eagle nest during the breeding season (page 4).
- to avoid operations and activities near to active roost sites during the period from two hours before sunset until two hours after sunrise (page 5).
- to avoid felling trees containing nests (page 7).

Keeping records of the decisions taken in relation to forest management around nest sites is a good way of demonstrating that reasonable precautions have been taken.

Box 2 – Key definitions used in this note (also see Box 5)

- Habitually-used nest: A nest that has been used in any of the previous five breeding seasons.
- Active nest: A nest that is currently occupied.
- Harass: Repeatedly disturb a white-tailed eagle or group of white-tailed eagles at the same location. This will be particularly relevant to roost sites.
- Reasonable precautions: The measures described in this note. Adherence to this advice is likely to protect forest and woodland managers from prosecution, but this guidance cannot be taken as a definitive statement of the law and courts will make the ultimate decision.
- Roost site: A place where individuals or groups of white-tailed eagles congregate to rest and sleep.
 Roosts are frequently located in trees.

This practice note describes restrictions on access and it is important to note that any such restrictions should be managed and practised in accordance with Part 1 of the Land Reform (Scotland) Act 2003. A full copy of the access legislation, the Scottish Outdoor Access Code and accompanying guidance on signage and access management is available at www.outdooraccess-scotland.com.

Disturbance and harrassment of white-tailed eagles

What are the risks?

White-tailed eagles usually nest on cliff ledges or in trees. A significant proportion of Scottish white-tailed eagles nest in trees, with many nests in commercial, coniferous forestry on private land and the national forest estate. Though evidence from Scotland is as yet limited, evidence from other countries suggests that they are sensitive to disturbance, and activities such as forestry operations of various types close to or within sight of nests can cause white-tailed eagles to abandon eggs or chicks.

Figure 1 White-tailed eagle nest in larch in mixed conifer woodland.



Figure 2 Large white-tailed eagle nest in oak tree.



Figure 3 Young white-tailed eagles in nest.



Significant breeding activity lasts from February to August (see Table 1) and it is during this period that forest managers need to take reasonable precautions to avoid disturbing active nests.

White-tailed eagles also gather to roost and repeated disturbance of such roost sites also risks 'harassing' these birds. Habitually used nest sites are often used as night roosts outside the breeding season and roost sites should therefore be protected from repeated disturbance.

Avoiding disturbing birds at active nests

The best way of avoiding the risk of disturbing white-tailed eagles at active nests is to restrict potentially disturbing activities near to the nests during the breeding season. The risk of disturbance depends on the type of activity and distance from the nest, and it is helpful to plan operations using two concentric protection zones around active white-tailed eagles nests, as shown in Figure 4.

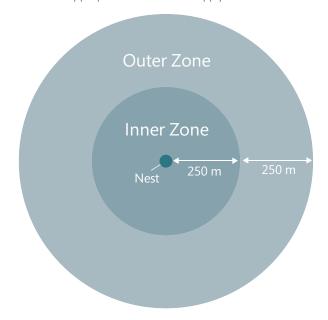
Tables 2 and 3 show which operations should be restricted or avoided at different times of year in each of these zones and which activities should carry little or no risk.

If the measures recommended in the tables do not seem appropriate in the context of your site or operation, seek advice from SNH on whether your circumstances (e.g. local topography, the nature of your operation) mean that alternative prescriptions would be suitable. Managers should ensure that everyone involved in planning or undertaking operations or activities is aware of the zones and restrictions that will be used.

Table 1 White-tailed eagle breeding cycle.

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Occupation of home range												
Sensitive breeding period												
Nest building												
Laying												
Incubation												
Hatching												
Chicks on nest												

Figure 4 Protection zones around a white-tailed eagle nest. These should be set in place from 1 February to 31 August*. See Table 2 and 3 for details of appropriate restrictions to apply within the two zones.



^{*}Sometime sea eagles also build or repair nests in short spells during December or January. Forest managers should be sensitive to this possibility and try to respond by avoiding disturbing activities in the inner zone when it occurs. However it is not necessary or reasonable to expect full zonation of forest operations throughout these months.

Avoiding disturbing birds at roost sites

White-tailed eagles often roost together in groups. Roosting takes place mainly outside the breeding season, but may occur at any time of the year. Roosts are mainly formed by immature birds during winter, as territorial adults usually remain on their territories and often roost on nests. In Scotland, the groups are generally small but may involve up to a dozen individuals. Roost sites are thought to be important in terms of the survival and population ecology of white-tailed eagles.

Given that it is illegal to harass white-tailed eagles, roost sites should be protected from repeated disturbance (harassment). However, roost sites are not themselves protected and it is not illegal to thin or fell a roost site as part of a legitimate silvicultural operation.

If work near a roost site is necessary, a reasonable precaution to avoid a risk of harassing white-tailed eagles would be to avoid forestry operations, activities or recreational events within 250 m of an active roost site during the period from two hours before sunset until two hours after sunrise.

 Table 2
 Inner Zone – Within 250 m of an active white-tailed eagle nest.

	Feb	Mar	Apr	May	Jun	Jul	Aug	Notes and exceptions
Machinery operations: felling, thinning, mounding								See note 1.
Forest management work: spraying, planting, weeding, surveying and fencing								See note 1.
Road and track building and maintenance								See note 1.
Deer management: stalking and shooting								Single visit activity likely to be okay in yellow period
Use of existing forest roads and tracks by forestry-related vehicles								For yellow period use alternative routes and/or routes most distant from nest. Use routes outside Zone 1 if possible.
Use of existing forest roads and tracks by public								Encourage use of alternative routes outside Zone 1 where these exist.
Recreation events e.g. rallies, charity walks, biking events								Avoid except on main public roads and constantly busy forest tracks. See note 2.
Quarry blasting								
Helicopter and aircraft flights								Avoid flights below 1000 m altitude, unless for health and safety reasons. See note 3.

Note 1: Unless for health and safety, or on far side of main public road from nest and after 15 June.

Note 2: Advise third party event organisers to avoid events or re-direct to less sensitive sites

Note 3: If you wish to use helicopters or aircraft within 1 km radius of active nests, seek advice from SNH.

Footnote: When it is essential, for health and safety reasons or otherwise, that any listed activity must take place within Zone 1 (250 m radius of nest) during the breeding season, seek advice from Forestry Commission Scotland or SNH before you proceed.

Table 3 Outer Zone - Between 250 m and 500 m of an active white-tailed eagle nest.

	Feb	Mar	Apr	May	Jun	Jul	Aug	Notes and exceptions
Machinery operations: felling, thinning, mounding								Limited work possible e.g. where topography limits limits noise, or on far side of main public road from nest. Seek advice from SNH.
Forest management work: spraying, planting, weeding, surveying and fencing								Limited work possible e.g. where topography limits limits noise, or on far side of main public road from nest. Seek advice from SNH.
Road and track building and maintenance								Disturbance unlikely if not visible from nest. Seek advice from SNH.
Deer management: stalking and shooting								Disturbance unlikely if not visible from nest. Seek advice from SNH.
Use of existing forest roads and tracks by forestry-related vehicles								Attempt to limit usage in breeding season. Use roads and tracks most distant from nest routes and outside Zones 1 and 2 if possible.
Use of existing forest roads and tracks by public								Attempt to limit usage in breeding season. Encourage use of alternative routes outside Zones 1 and 2.
Recreation events e.g. rallies, charity walks, biking events								Disturbance unlikely where not visible from nest. Encourage use of alternative routes outside Zones 1 and 2 where possible.
Quarry blasting								Limited blasting only (<twice 1="" 31="" attempt="" blasting="" jan.<="" restrict="" sept="" td="" to="" weekly).=""></twice>
Helicopter and aircraft flights								For red period avoid flights below 1000 m altitude, unless for health and safety reasons. See note.

Note: If you wish to use helicopters or aircraft within 1 km radius of active nests seek advice from SNH.

It would be beneficial to the conservation of white-tailed eagles for managers to consider managing the roost site. Furthermore, roost sites may later become nest sites and this may help forest managers to predict where the white-tailed eagles will nest, and so could help managers plan to minimise disruption to future thinning and felling etc.

Roost sites are often in mature and well-thinned stands, but may also be in younger, unthinned plantations. Several trees may be used at the roost site. Figure 5 shows a roost tree in thicket stage Sitka spruce plantation. Up to ten individuals used several of the biggest trees in the photograph and the ground was littered with feathers and droppings.

A light thinning around the roost trees may improve their wind-firmness, which could encourage sea eagles to continue using the roost site, and increase the likelihood of eagles nesting there. A heavy thinning may render a roost site unsuitable, if it exposes the roost trees to wind. A few of the roost trees could also be altered to facilitate access for nesting (see page 8).

Figure 5 Nest site on the edge of a Sitka spruce stand.



Damage to nests

What are the risks?

The habitually-used nests of white-tailed eagles may not be intentionally or recklessly damaged, destroyed or otherwise interfered with, *even when not in use*. Therefore, during thinning and clear felling operations, it would be an offence to fell a tree that contains a habitually-used nest.

However for nests not in use forestry operations or activities may be carried out right up to and around white-tailed eagle nests without causing disturbance or harassment. Restrictions of the type described in Tables 2 and 3 are not therefore necessary.

Avoiding damage to nests

Forest managers should not be discouraged from thinning in coupes containing white-tailed eagle nests, outside the breeding season, as this will be important for maintaining the wind firmness of the nest tree. However, predicting the wind blow risk to an individual tree following thinning is very difficult and a nest tree may subsequently blow down as a result of even the most careful of thinning operations. To demonstrate that a reasonable approach has been taken, it is a good idea for forest managers to discuss thinning proposals around white-tailed eagle nests in advance with local Forestry Commission Scotland and SNH staff and put in place a nest management plan including mitigation proposals (see opposite). RSPB staff may also be able to advise.

If a tree containing a habitually-used nest blows down as a direct result of a clear felling operation, e.g. where the nest tree is left isolated on a clear fell site, this could be regarded as reckless behaviour. To avoid such a scenario, forest managers should discuss options with Forestry Commission Scotland and SNH staff as soon as a white-tailed eagle starts nesting on a coupe programmed for felling. Management options may then be agreed in advance in a nest management plan (see opposite). Options may include deferring the felling, deploying a nest platform to encourage the birds to nest elsewhere, or designing a long-term retention to accommodate the nest.

What if a manager needs to fell a tree containing a nest?

A pair of white-tailed eagles may have several nests within their territory. Not all are used habitually. In general, forest managers should attempt to leave all nests in place. Newly built nests should never be damaged in any way.

In exceptional circumstances, it may be possible to obtain a licence from the Scottish Government to fell a tree containing a habitually used white-tailed eagle nest during the period whilst it is inactive (for contact details see page 10). You must apply for and obtain the licence before operations are started. To obtain a licence you will need to be able to demonstrate that there was no satisfactory alternative, and that the operation was being done for one of a number of exempted purposes. The main purposes relating to forestry are:

- conserving any area of natural habitat;
- preserving public health or public safety;
- preventing serious damage to growing timber (in some cases, this could be interpreted to include operations necessary to manage commercial forests, if not managing them would in the long term lead to serious damage to growing timber).

There may also be cases where a nest has not been used for several years so that it could be classed as no longer being 'habitually used'. Where an old and seldom-used nest is located within a coupe programmed for thinning or clear felling, the tree may normally be felled provided that the nest has not been used for at least five years and there is an alternative nest available in the territory. In all cases the forest manager should consult with local SNH staff in advance of felling any tree containing a suspected white-tailed eagle nest.

Habitually used nest sites are also often used as night roosts outwith the breeding season. So it is a good idea to check with SNH or RSPB staff on whether a nest is being used as a roost.

Management planning in the presence of white-tailed eagles

Nest management plans

To help plan for the future it is a good idea for forest managers to develop a nest management plan setting out how to treat known nest sites, with help from local SNH staff and other experts. A nest plan should combine the views of sea eagle experts with the silvicultural knowledge of foresters to make every effort to ensure that the nest continues to be used.

If wind blow risk makes clear felling the only option for the site, the management plan should include the provision of two or three alternative sites as close as possible – using methods listed on page 8. Copies of the nest management plan should only be held by the site manager and those involved in developing the plan. The following are hypothetical examples of nest management plans:

Box 3 - Nest plan example 1

Nest location: Glen Mhor

Land owner: Mr Smith, Glen Mhor Estate.

Forestry manager: A Birch, Scottish Forestry Ltd.

Plan consultant 1: A Bird, RSPB.Plan consultant 2: B Good, SNH.Nest reference: WTE plan 1

Nest history: Occupied in 2007 and 2008.

Three chicks produced.

Stand attributes: P70 Sitka spruce, unthinned

Stand management: Planned for clear felling in 2015

Nest management: Thinning of stand is not possible due to high wind blow risk. Therefore, two artificial nests will be constructed in location 1 and location 2, in 2011, as advised by RSPB. RSPB staff will monitor the early breeding season behaviour of the pair and report back to the forest manager each breeding season. This will allow additional action to be undertaken as necessary. Map showing proposals attached.

Box 4 – Nest plan example 2

Nest location: Glen Wee
Land owner: Mr Brown.

Glen Wee House Estate.

Forestry manager: A Beech, Scottish Forestry Ltd.

Plan consultant 1: A Smith, RSPB.
Plan consultant 2: B Jolly, SNH.
Nest reference: WTE plan 2

Nest history: Occupied in 2008.

One chick produced.

Stand attributes: P30 Scots pine, thinned

Stand management: Planned for clear fell in 2020

Nest management: RSPB and SNH advised that the site is important in a local context due to the lack of alternative sites. Therefore, a 2 hectare section of the coupe centred on the nest tree will be kept as a long-term retention. As this exceeds the 1% of LTR required under UKWAS, the forest manager will liaise with local SNH staff on an ongoing basis and review the situation annually. Map showing proposals attached.

Note – White-tailed eagles tend to have favourite perches in association with and generally close to each nest, and removal of key perches could render a nest site unsuitable, even if the nest remains. A nest management plan should identify regular perches used by nesting adults and plan for their retention (as far as possible) in addition to that of the nest tree.

Planning to conserve white-tailed eagles

The white-tailed eagle population in Scotland will continue to expand in both size and range. This is likely to increase the number of nests in commercial plantations and therefore the number of protection zones. Plantation managers that have, or are likely to have, breeding white-tailed eagles, should plan ahead to minimise any disruption to future harvesting and restocking programmes. SNH and RSPB staff can advise on the likelihood of white-tailed eagles colonising a particular plantation.

One way to minimise future disruption to plantation management may be to actively encourage white-tailed eagles to nest in specific parts of the forest where their presence will have least impact. This is most likely to be achieved by providing secure nests in quiet areas. Such predictable nest sites not only make management easier, they may also contribute to the conservation of the species. This is because white-tailed eagles often nest in sub-optimal locations due to a lack of choice, and because of the inexperience of young birds. These nests are sometimes destroyed by strong winds or abandoned due to disturbance.

New sites could be created in advance of future operations, so that white-tailed eagles may be encouraged to move nests around the plantation. This is possible because white-tailed eagles will often move their nest sites, in any case, for various reasons. It is important to note, however, that providing nest sites does not allow you to destroy existing nests built by white-tailed eagles.

Options for encouraging eagles to nest in specific places are listed below.

- Create an attractive site for white-tailed eagles to build a nest. This technique is particularly useful in spruce. Within existing long-term retentions, select a large, wind-firm tree in a quiet location. The tree should have an easy flight line in and out e.g. it should be on or near the edge of the retention. Identify a large branch or branches, approximately two thirds of the way up the tree, capable of supporting a large nest. On the side of the tree facing outwards from the retention, cut off all of the branches up to 1.5 m above your nest branch. The objective is to allow the eagles to access a large branch upon which they can build a nest, whilst retaining some branches above the potential nest site for cover. A triangle of large sticks approximately 1 m x 1 m x 1 m secured to the nest site branches may increase the attractiveness to white-tailed eagles.
- Locate long-term retentions in non-commercial areas attractive to white-tailed eagles. In commercial plantations, planted trees are too small, or have the wrong structure, for white-tailed eagle nests for a large part of the rotation. This

means that long-term retention stands have the potential to attract white-tailed eagles to establish traditional nest sites (and roosts) away from commercial blocks and operational activity. Long-term retentions should be located near water bodies, such as lochs, or on upper edges of hillside plantations if possible. Depending on local circumstances, a small group of trees may be adequate. Retentions of 1 to 3 hectares will certainly be sufficient in size, even if isolated from other woodland by open ground.

• Consider making a nest platform in a suitable tree. Ideally this should be in a large tree in a quiet part of the forest. It should be placed so that eagles have an unobstructed flight to and from the platform. Natural nest sites tend to have a good view of surrounding land, typically including a large water body. Advice on building nest platforms can be obtained from SNH or RSPB.

Learning from experience

White-tailed eagles have only been established in western Scotland for two decades and are currently being re-introduced to eastern Scotland. In order to help us learn from experience of how these birds react or adapt to possibly disturbing activity, and then update and improve the guidance, it will be valuable to build up a record of how issues are dealt with.

To help do this SNH and Forestry Commission Scotland will keep a log of cases which are referred to them by woodland managers for advice, and RSPB will also contribute their experience.

Figure 6 White-tailed eagle.



Box 5 - White-tailed eagles and the law

White-tailed eagles are protected by the Wildlife and Countryside Act (W&CA) (1981), as amended by the Nature Conservation (Scotland) Act 2004. They are listed on Schedule 1 of the W&CA and this makes it an offence to intentionally or recklessly kill, injure or take a wild bird; damage, destroy, obstruct, or interfere with a nest, whilst it is being built or is in use, or disturb a white-tailed eagle while it is building a nest, or is on or near a nest containing eggs or dependent young.

White-tailed eagles are also listed on Schedules 1A and A1 of the W&CA. Being on Schedule 1A means it is an offence to intentionally or recklessly harass a white-tailed eagle at any time. This includes birds away from their nests and outside the breeding season. Harassment implies multiple actions (2 or more disturbing incidents), whilst disturbance implies a single event.

Being on Schedule A1 means it is an offence to intentionally or recklessly damage, destroy or otherwise interfere with a habitually-used nest of a white-tailed eagle, even when it is not in use.

The Nature Conservation (Scotland) Act 2004 introduced the concept of 'recklessness', which covers circumstances when actions that disturb, injure or kill protected species are not carried out intentionally. Reckless disturbance or damage would arise if:

- A person was aware of the likelihood that disturbance or damage would result from his actions, but proceeded with the action regardless of its consequences; or
- A person undertook an action in circumstances where any reasonable person could be expected to have foreseen the potential for disturbance or damage, but proceeded without regard to the consequences.

An action resulting in disturbance or damage is unlikely to be considered reckless if:

- A person recognised the possibility of disturbance or damage; and
- Followed sound and reasonable guidance from an expert body about the manner in which such action(s) or operation(s) could reasonably be carried out in those circumstances.

In other words, the central principle is the requirement for forest managers to take 'reasonable precautions' and to take 'such steps as were reasonably practicable in the circumstances' to minimise the impact of the action.

Useful sources of information

Publications

Birds of Scotland.

Scottish Ornithologists' Club.

Raptors – a field guide to survey and monitoring. The Stationery Office.

Research articles and other literature

RUDDOCK, M. and WHITFIELD, D.P. (2007). A review of disturbance distances in selected bird species. Report from Natural Research (Projects) Ltd. to Scottish Natural Heritage.

Resources

To discuss or obtain a license to fell a tree containing a habitually used white-tailed eagle nest, please contact:

Species Licensing Team, Landscape and Habitats Division, Rural Directorate, The Scottish Government, Room 1-A North, Victoria Quay, Leith, Edinburgh EH6 6QQ

Telephone 0131 244 6549 Fax 0131 244 4071 Email specieslicensing@scotland.gsi.gov.uk

Enquiries relating to this publication should be addressed to:

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