South West England has a higher population of nightjars per square kilometre than anywhere else in the UK. The 2004 National Nightjar Survey, organised and carried out by the RSPB, British Trust for Ornithology, English Nature and Forestry Commission, estimated 4,513 churring males, representing a 32% increase since the last survey in 1992. The South East and South West showed the largest increases in the UK with range expansions exceeding 15%, in both regions.

Changes in population size between 1992 and 2004 seem to be largely due to strengthening of local numbers and expansion around main breeding areas, particularly in southern and eastern England. The greatest change in population was on dry heathland probably in response to heathland management projects such as on the Dorset Heaths, but small increases in forest plantations suggest that sympathetic forest management has also played a role.

The continued national increase in the nightjar population is probably largely attributable to habitat protection, management and restoration/creation. This is encouraging but the lack of increase in range is disappointing. Also of concern, is maintaining heathland-nesting habitats in the face of increased pressure for housing development in southern England and increased public access due to open access legislation.

The results of a repeat survey in 2014 are likely to be very interesting, in terms of seeing if populations can be maintained in the main breeding areas or if they have peaked, as in the Brecklands, East Anglia. It will be interesting to discover if new funding opportunities for landowners have helped the birds recolonise some of those areas previously occupied in the 1960-70s.

In Dorset over 100 volunteers, conservation and forestry staff surveyed 342 one kilometre squares, covering 16,110 hectares of heathland, woodland and coniferous plantation.

Seven hundred and fifty two male nightjars were recorded in Dorset. This represents a 41% increase since 1992. Dorset holds 17% of the UK's nightjar population.

This work was co-ordinated by Sophie Lake for the DHP partially funded by the HEH Project.

The European nightjar, Caprimulgus europaeus has declined in population numbers and range since at least the 1950s, especially in north west and northern Europe. It is currently regarded as having an ‘unfavourable’ declining population status. At one time, nightjars were more widely distributed across Britain, but large-scale losses of heathland to agriculture, development and forestry led to both a contraction of range and a severe population decline – meaning their numbers may have been halved between 1972 and 1981, certainly in terms of range, with only scattered records remaining in south west Scotland and in Wales. Declines also occurred across large swathes of northern and central England. In Northern Ireland, they are probably now extinct as a breeding species.

By 1992, the second national nightjar survey was able to report 3,400 ‘churring’ males, signifying a change in fortunes that was probably in response to improved forestry management. Nightjars were showing an increasing dependence on felled or recently planted conifer plantations and over half (54%) of calling males were recorded there. Despite the partial population recovery, the breeding range of nightjars was still far short of its former range.
The Dorset Heathland Project (DHP) has been involved in the Hardy’s Egdon Heath (HEH) project since 2000. The project includes 13 partner organisations and is funded by the Heritage Lottery fund through the Tomorrow’s Heathland Heritage initiative. It facilitates the management of heathland across the county. The DHP operates on sites owned by the Ministry of Defence (MoD) and QinetiQ, at Barnsfield, Hurn and West Moors, in the East of the county, and at Bovington and Lulworth in Purbeck. With two teams, the DHP has undertaken the management of 255.72 hectares. The total amount of tree scrub and gorse management that all 13 partners will complete through the HEH Project is around 1277 hectares – so the DHP target represents about a fifth of the overall total!

• The DHP receives additional funding from SITA Environmental Trust for the MOD sites at Lulworth and Bovington. This is aimed at enhancing public enjoyment of these heathland areas by – for example - providing interpretation boards at viewing points. The DHP has also assisted the MOD in setting up a circular walk at Bovington.

The RSPB will continue to work closely with QinetiQ in achieving favourable condition of the Sites of Special Scientific Interest (SSSI) at Barnsfield and Hurn.

**Project Update**

Between the year 2000 and March 2005, the Avon valley team has removed and coppiced tree scrub and gorse, from around 75.63 hectares of land on the Eastern heaths and the Purbeck team has completed work on 130.12 hectares at Bovington by January this year. This has transformed the way the sites look, increasing areas of open heath and safeguarding the future for some incredibly rare heathland wildlife such as woodlarks, Dartford warblers, nightjars, heath tiger beetles, marsh club moss and coral necklace.

This winter sees the concluding phase of work and a final push at Lulworth, with both teams joining forces to achieve the DHP target – and there’s less than 50 hectares left to do.

**Marsh clubmoss feels the earth move!**

Earth disturbed by the wheels of tractors at Bovington has proved productive for a nationally scarce heathland plant.

During the summer survey, DHP staff discovered that tractor tracks made during winter management work at the site were carpeted in new marsh clubmoss plants. This has increased the plants’ range by over 100 meters.

Marsh clubmoss, *Lycopodiella inundata*, is found on wet heaths - usually on bare peaty soil. It survives in places where human activities provide disturbance and maintain areas of bare, seasonally flooded peat. These include natural tracks, old peat cuttings and wet areas grazed by cattle.

Since 1855, it has declined dramatically, through habitat loss (as a result of building development and forestry) and a decrease in traditional management practices like peat cutting and grazing. Drainage, nitrate and phosphate pollution may also be responsible, along with atmospheric pollution and the presence of heavy metals.
Ten new fungi species for Lulworth

Ten species of the waxcap family of fungus have been recorded at West Creech. They were discovered during a survey of the site’s training area and include the orange waxcap (Hygrocybe aurantiosplendens) and the spangle waxcap (H. insipida), both of which are European red list species. Military training at Lulworth has protected this part of Purbeck from agricultural intensification which has affected the surrounding area. Traditional grazing management and lack of chemical fertilisers or pesticide has preserved this truly special grassland, which is of regional, if not national importance.

Waxcaps are important as good ecological indicators. They are very sensitive to disturbance by machinery and nutrient enrichment. Species of the fungus may be found on ancient grassland undisturbed by such activities, whereas fields and pastures that have been improved by fertilisers will have few species, if any.

Thanks to Steve Marshall (Regional Reserve Manager) and Martin Allison (RSPB Tudely Woods Reserve) representing the RSPB’s Fungi Taxa Team for their expertise. Thanks also to the Cake Brothers for access to their farm.

Heath Bee Fly

They are called ‘bee-flies’ simply because they are flies which resemble bees. They are divided into two groups, those with long tongues and those with short tongues. Heath bee-flies belong to the group with long tongues and this provides a means of identifying them. They have brown furry bodies, relatively short abdomens, and long wings, which are held outstretched when they are at rest.

Heath bee-flies are parasites, living off solitary bees. Collistis sp. Solitary bees nest around bare ground on lowland heathland. Bee-flies fill their egg pouches, beneath their bodies, with sand granules which stick to the eggs. They then flick the eggs into the burrow of the unsuspecting solitary bee, where the larvae develop, to emerge as an adult the following summer. It is unclear whether the bee-fly larvae feed on the bee grub or its food store. Adult bee-flies like herb-rich acid grassland edges with low heather, where they gather nectar from plants such as heather. They do this like hummingbirds, hovering in front of the chosen flower and using a huge proboscis as a drinking straw to suck up the high-energy nectar.

The heath bee-fly is listed in the UK Biodiversity Action Plan, and included in English Nature’s Species Recovery Programme. In Great Britain, this species is classified as Vulnerable.

This species is mainly confined to southern heathland, where it has suffered a contraction in range; it is currently known from only a few sites in Dorset.

There is still relatively little known about this insect’s biology.

Bee-fly monitoring is an ongoing project.
NEWS in brief

Dorset Heathland Survey
During the summer of 2005, the DHP teams, along with wardens from the RSPB Dorset Heathland Project, have been surveying the heaths under the Seal (Game and Wildlife) Act 1976 as part of a new study to examine the quality and quantity of the heathland in the county. The 2005 survey coincides with the completion of the RSPB and Environment Agency’s £2.4 million project to improve heathland at Lulworth and West Moors. The DHP surveyed an area at Bovington, where an extension to one of the main roads is underway. Advice was provided on the timing of work and instructions given regarding the prevention of impact on sensitive habitats. The DHP also completed a Phase One Habitat Survey at West Moors, for incorporation into the integrated land management plan.

Consultancy role for DHP
The DHP has been advising Devon Services, who manage the MOD’s heathlands at Bovington, Lulworth and West Moors. The DHP surveyed an area at Bovington, where an extension to one of the main roads is underway. Advice was provided on the timing of work and instructions given regarding the prevention of impact on sensitive habitats.

Bournemouth in Bloom
The East Dorset RSPB Local Group has taken on the job of judging the Best Sustainable Garden for Birds category in the Bournemouth in Bloom competition. Over the last three years, as part of the RSPB’s work to encourage people to look after the birds in their gardens, the DHP has supported the competition by providing staff to judge the gardens and by arranging prizes and displays for the winners’ evening.

Arne Nature Reserve 40th Anniversary
The RSPB Arne Nature Reserve is celebrating its 40th Anniversary this year, with a series of events running from 25th July – 7th August. There will be guided walks, family fun and open weekends, plus a special evening music event. For details, contact the Arne Reserve (01929 553360). The RSPB is also offering a new guide for heathland managers. Conservation Grazing on Lowland Heath is based on research carried out in Dorset. Copies are available from the RSPB Arne Reserve (01929 553360).

New grazing guide
The RSPB has published a new guide for heathland managers, Conservation Grazing on Lowland Heath. It is available from the RSPB Arne Reserve (01929 553360).

Insects under the spotlight
Throughout the summer, the team will continue its monitoring of Southern damselflies on behalf of the Environment Agency and English Nature on various sites in Purbeck and also the Purbeck mason wasp on the National Trust Reserve at Godlingston Heath. Both species already benefit from habitat management work carried out by the DHP.

Dorset Heathland Survey
For the second year, the DHP has joined forces with local RSPB staff to deliver Christmas trees to schools. We hope to extend this valuable service in future years. Advice was provided on the timing of work and instructions given regarding the prevention of impact on sensitive habitats.

SITA Environmental Trust
At the end of March, the chainsaws are finally silenced as the birds’ breeding season begins. This is when we carry out survey and monitoring work, the results of which demonstrate how the management work done in the winter helps provide breeding habitat for rare heathland wildlife - notably nightjars, Southern damselflies and the rare Purbeck mason wasp. It is quite amazing to revisit places the team has previously worked on and see the wildlife re-establishing where the heath had previously been degraded, or plantations once stood. This is the real reason I became involved in practical conservation - to contribute towards improving the biodiversity of the countryside - and the DHP has certainly achieved that!

Staff profile
Project assistant Rob Pilmore explains his role with the DHP.

After working with the Devon Wildlife Trust, I was keen to further develop my practical skills and applied for a job with the DHP. I started working with the Purbeck Team, on MOD sites at Bovlington and Lulworth, in September 2004, being pleasantly surprised to learn that the RSPB is much more than just a bird charity!

We’re a mobile team of five, based in a portable workshop located on whichever site we happen to be working on. Working outdoors makes you very interested in weather forecasts and a robust sense of humour is definitely an essential part of your toolkit! The winter months are all about the habitat management work happens; we’re flat out doing things like removing pine trees and coppicing birch and senile gorse stands. We use chainsaws to fell the scrub and another machine to turn what we’ve cut down into useful woodchippings, which can be used for garden mulch. In some areas where the ground is very boggy, we carefully burn the branches instead.

At the end of March, the chainsaws are finally silenced as the birds’ breeding season begins. This is when we carry out survey and monitoring work, the results of which demonstrate how the management work done in the winter helps provide breeding habitat for rare heathland wildlife - notably nightjars, Southern damselflies and the rare Purbeck mason wasp. It is quite amazing to revisit places the team has previously worked on and see the wildlife re-establishing where the heath had previously been degraded, or plantations once stood. This is the real reason I became involved in practical conservation - to contribute towards improving the biodiversity of the countryside - and the DHP has certainly achieved that!