# BUTTERFLY CONSERVATION UPPER THAMES BRANCH

# The 2005 Striped Lychnis *(Shargacucullia lychnitis)* Report for Buckinghamshire

## by Peter Hall

**On behalf of Butterfly Conservation and Buckinghamshire County Council Countryside Services.**

A special thank you goes to the following people who gave up their time and in some cases, annual leave, to help with surveying for this special moth. As more sites are discovered, and the number of known plants increases, full scale surveying becomes quite an onerous task. Weather conditions this year were also very mixed and surveying in full waterproofs is not the most comfortable of occupations.

Andrew McVeigh, Julia Carey, Anna Humphries and Simon Pile of Bucks County Council

Joanne Hodgkins, Neil Harris and Martin Barnett of the National Trust

Martin Albertini, County Moth Recorder

Eric Britnell, Alan and Juliet Gudge, Ched George and Trevor Hussey.

The next survey is planned for 2010.

# Peter Hall

27th November 2005

## Contents:



## Introduction

This document outlines the results of the latest Striped Lychnis summary for Buckinghamshire in 2005. The survey was conducted from July 21st until August 10th. All known sites were visited. New sites were discovered once again. In total 37,702 plants were surveyed revealing 5,075 larvae.

Reports will be circulated to Butterfly Conservation, Bucks County Council, the National Trust and individual volunteers. Further publications are planned for the Entomologist's Record and Journal of Variation, the Bucks Invertebrate Group Bulletin and British Wildlife. Electronic Versions along with many photos of larvae and habitat are available upon request. Please contact me by e-mail.

Sites that have been typically early for the moth were targetted first. These were Green Farm, Hughenden and Sprig's Alley, Radnage. Both are huge sites and posed quite a logistical challenge. Numbers of plants at Sprig's Alley exceeded 10,000 for example.

The weather varied from sunny and warm to very wet and cool. These variations alone provided some difficulties. Considerable distances were walked and the collection of grass seeds in the socks, stinging nettles rashes and insect bites brought vivid reminders of previous surveys.

5 Core Sites were identified in 2000 and this figure has now risen to 12 after the 2005 survey. The majority of site groups show improvements in both foodplant numbers as well as larval numbers.

# Results and Discussion

## Site Group Summaries

1. **Piddington to West Wycombe**

230 larvae recorded in 2000 compared to 594 in 2005. Plants: 1544 in 2000 and 3564 in 2005. Most plants were located in fields either side of the Old Dashwood road, however good numbers of larvae were detected on relatively few plants along the main road verges of the Road Verge Nature Reserve (RVNR). Verge cutting avoidance here is rather important. Numbers on the chalk slopes of West Wycombe Hill declined despite more foodplant. Part of the grassland area between the old and new roads on the Dashwood Hill has been planted with woodland and will reduce plant and probably larval numbers in the next few years as the trees grow. Core site status.

2. **West Wycombe to Saunderton (A4010)**

264 larvae in 2000 and 192 in 2005. Plants: 776 in 2000 and 1235 in 2005. Ditch clearance work on the stretch from West Wycombe roundabout to the railway bridge reduced larval numbers and available foodplant considerably. Many of the 192 larvae and plants found this time were from newly discovered sites close-by. No large aggregations of larvae this time, rather smaller pockets. Core status in 2000, marginal in 2005.

3. **High Wycombe**

265 larvae in 2000, 742 in 2005. 819 plants in 2000, 9779 in 2005. Small pockets of plants dotted around the town did not produce many larvae this time. Larvae were found again in small numbers around Sands Bank and the football overflow car park. The main population was at the National Trust site of Green Farm. Numbers have not yet reached their peaks of 4 years ago, although the stewardship scheme is now more strictly controlled. From 2002 when over grazing caused areas to be denuded of almost all vegetation, to the present day where Wild Carrot has colonised these bare patches and created quite a dense sward. Ironically Wild Carrot has also had a negative impact on the foodplant on the traditionally larval rich fields due to competition. Numbers now at 67% of 2001 (2002 33%). Plenty of foodplant present but the majority at lesser preferred (more shady) fields. High Wycombe Site Group still recorded the highest totals of larvae overall. Liaison will occur with the NT to try and re-create more foodplant on the sunny south facing open slopes once again so favoured in previous years by the moth. Core Site Status.

4. **Penn and Tylers Green**

A very small cluster of foodplant, rather isolated from moth colonies. No larvae found, 7 plants recorded.

5. **Cryer's Hill**

136 larvae in 2000 and 303 in 2005. For plants 148 were recorded in 2000 and 141 in 2005. The grass field with its small area of chalk grassland near to the top once again recorded exceptional numbers of larvae. Larvae were also found on the plants now left uncut on the road verge of the hill itself. 14 huge plants at the bottom in Valley Road were surprisingly larvae free. The plant reported in the 2000 summary as supporting 104 larvae, this year had just over 80. It does appear to be a firm favourite, rather surprising as although it is a large many spiked plant, it is surrounded by tall *Arrhenatherum elatius* sward. Core site status.

Roadside plant on Cryers Hill Road

A favourite plant

6. **Slough Lane and Buttler's Hangings**

304 larvae in 2000, 223 in 2005. Foodplant: 631 plants in 2000 and 319 in 2005. Mixed fortunes. At Buttler's Hangings there was a marked increase in foodplant and also numbers of larvae. Running along the ridge the reserve gives way to set aside field boundaries which are species rich chalk grassland strips mainly left for pheasants. Two corners of these strips support large numbers of plants and also larvae. However, plant numbers have dwindled and larval numbers decreased accordingly. Still maintains Core status.

7. **Bradenham and Small Dean Lane**

Many of these sites were only discovered during this last survey. On the National Trust fields there were only a few plants, but these supported very large numbers of larvae. Care should be given to the timings of the set-aside cut to avoid felling the plants until after pupation. The Bradenham fields would benefit from increasing plant numbers along the field boundaries.

There is probably an, as yet, undiscovered core site nearby. Small Dean bank supported its small numbers of larvae and plants as per usual. The plants in the car park are now carefully missed on mowing. The small chalk bank in the Eastern side of Park Wood, surrounded by forest, supported low numbers of larvae also, although the more open site nearer to the chalk grassland bank, where the footpaths fork, did not support any larvae despite many plants. Competition with other plants was high in this area and would not be a preferred egg laying sight for the adult moth.

Entrance to Small Dean Bank Carpark

Edge of NT Set-Aside Field

## 8. **Wormsley Estate**

First surveyed in 2002 and revealed 629 plants with 512 larvae. 2005 showed similar numbers of plants at 696 but a decline to 213 larvae. Most of this reduction was from lower numbers at Lower Vicar's Farm area. Core status. Healthy aggregates of larvae found in a number of parts from Grays Lane Bank to footpaths within the estate to Lower Vicar's Farm.

Andy McVeigh along a Footpath in the Wormsley Estate

9. **Hughenden Valley**

28 larvae in 2000, 130 in 2005. Plants: 342 in 2000, 416 in 2005. Most of the larvae found this survey were in the Longrove Plantations – an area planted with trees some years ago. Growth is rather slow and the Dark Mullein plants hang on. Hampden and Warrendene roads had the verges clear cut with no plants left apart from rank growth in the ditches. Few larvae found. Most other larvae were on plants on Bryant's Bottom Road. Only 2 plants recorded from Prestwood Picnic Site LNR and no larvae.

**Martin Albertini (left) and Eric Britnell at Longrove Plantation**

10.**Speen to North Dean**

16 larvae in 2000, 64 in 2005. 305 plants in 2000, 146 in 2005. Most plants in this site group are to be found in Little Stocking Wood, although this enclosed chalk grassland is becoming more overgrown. Here 3 larvae were found only. Other larvae were found in a new site in improved pasture along Clappin's Lane with a cluster of mature plants revealing 20 larvae, the good roadside plants at Home Farm and then in a garden in Stocking Lane, Naphill. Probably other sites still overlooked.

11.**Radnage Area**

39 larvae in 2000, 289 in 2005. 759 plants in 2000 and 10,620 in 2005. A stunning number of plants once again in Sprig's Alley. 4 fields with over 10,000 plants. However, larval numbers were low relative to plant numbers and only 264 larvae were recorded. Other sites around Radnage revealed low numbers of larvae. Core status.

12.**Stokenchurch to Ibstone**

First surveyed in 2002 revealing 115 larvae, 127 in 2005. Plants: 481 in 2002 and 1116 in 2005. Most of the plants and larvae are to be found in a part chalk grassland part pheasant cover field adjacent to Penley Wood. Large numbers of plants grow successfully here and uncounted rosettes for next years flowering were large. Other plants and larvae scattered around the area in low numbers. Possibility for Core site status.

Ibstone Churchyard

13.**Swains Wood**

0 larvae in 2000, 8 in 2005. 50 plants in 2000, 93 in 2005. Some restorative work has been going on in the middle and lower sections of the BBOWT reserve and plant numbers have increased accordingly. Larvae found again albeit in low numbers.

14.**Frieth**

5 larvae in 2000, 63 in 2005. 5 plants in 2000, 83 in 2005. New sites discovered at Moor Wood and these sites responsible for the increases in both plant and larval numbers.

15.**Lodge Hill**

75 larvae in 2000, 317 in 2005. 372 plants in 2000, 1065 in 2005. A steadily improving situation with each survey conducted. The survey in 1996 found only 15 larvae and in 1998, 13. Plenty of foodplant now and numbers have increased sufficiently for this site to attain Core Status.

A Lodge Hill larva

16.**West Wycombe to Bledlow Ridge**

1 larva in 2000, 26 in 2005: 27 plants in 2000, 44 in 2005. Plants found in low numbers along the roadside verge and in the Garden Centre car park at West Wycombe. Most larvae found in the car park site, elsewhere few found.

**Verge plants (and larvae) at Bledlow Ridge**

17.**Homefield Wood**

30 larvae in 2000, 14 in 2005: 66 plants in 2000, 131 in 2005. Most plants to be found along the main ride which runs from the entrance gate along the bottom. Many rosettes ready for next year. Hopefully numbers will increase again. No plants found in the newly cleared areas this survey. The woodland clearance work may encourage more plants in the forthcoming years. Probably an undiscovered core site nearby.

18.**Marlow Area**

76 larvae in 2000, 287 in 2005. 952 plants in 2000, 522 in 2005. Plenty of larvae found again along Mundaydean Lane, Pump Lane and the A404. Plant numbers have shown a decline, but so far larval numbers have not suffered at all. Core Site status.

19.**Winchbottom Lane to Well End**

170 larvae in 2000, 387 in 2005: 736 plants in 2000, 727 in 2005. Two main sources of larvae here, one along Sheepridge Lane in a set-aside field. This field had been recently mown, presumably under set-aside regulations. The other site was on the Winchbottom Road RVNR, otherwise larval numbers fairly sparse. Core Status.

20.**Hedsor**

30 larvae in 2000, 2 in 2005: 397 plants in 2000, 22 in 2005. A dramatic decline in plant numbers.

21.**Hambleden Valley**

163 larvae in 2000, 111 in 2005: 815 plants in 2000, 1019 in 2005. Numbers of plants and larvae continue to oscillate up and down, but wherever good plants exist, there is a good chance of finding larvae too.

22.**Hambleden Estate**

424 larvae in 2000, 517 in 2005: 7370 plants in 2000, 3786 in 2005. Despite a reduction in plant numbers, the moth continues to thrive on this large grassy site. Highest densities of larvae found as usual along Dairy Lane and lower densities up and around Reservoir Hill in the grassland. Core Site Status.

Peter Hall surveying a chalk bank in the Hambleden Estate

23.**Medmenham to Fawley Court**

8 larvae in 2000, 29 in 2005: 190 plants in 2000, 191 in 2005. Small pockets of foodplant and also larvae. The entrance to Dairy Lane, which has young trees planted on a site with many Dark Mullein plants, is now carefully managed. Vegetation was carefully strimmed around the young trees, but all Dark Mullein plants were left. Similarly on the road verge at the entrance, plants were left when this verge was cut.

Entrance to Dairy Lane where foodplant has been left uncut

24. **Henley to Stonor**

A new site group with 390 plants and 177 larvae, all along the B480 road, partly in Oxon partly in Bucks. There are some very good stands of foodplant along this road with high densities of larvae found, particularly on the Oxfordshire stretch. This whole section of road should be considered for RVNR status. Core site status.

B480 near Lower Assendon

25.**Wendover**

No larvae found in 2000 and none also in 2005: 24 plants in 2000, 22 in 2005. Since a singleton larvae was found in 1996 in St. Marys churchyard, no other sightings have been made. If the Bacombe Hill colony can be expanded, this should provide the means to colonise this area. Possibility of planting along the new Aston Clinton by-pass.

26.**Bacombe Hill**

9 larvae in 2000, 44 in 2005: 1200 plants in 2000, 383 in 2005. 70 larvae were recorded in 2002 – the highest tally yet for this site which had larvae introduced in 1998. The main area of foodplant, which appeared after conservation work was carried out to clear the tumulus area, is now getting rather overgrown again. Seed has been collected from these plants and used to introduce new plants to other adjacent clearances. Some of these plants are doing very well, others are being competed out with coarse vegetation re-growth. More site management is to be encouraged to reduce the scrub re-growth. More plantings would be of benefit to the colony in suitable areas. The colony has now survived 7 years and should survive longer if availability of foodplant is sufficient. The target should be to attain Core site status which means larval counts exceeding 100. It is highly unlikely that this site has any interchange of moths from other areas due to its remoteness from other known sites. However, there is a large amount of foodplant available along the nearby A413 as far as the Amersham by-pass which is currently without a stable population (no records since 1999).

27.**Great Missenden**

No larvae in 2000 and none in 2005: 225 plants in 2000, 84 in 2005. There are large healthy plants along both sides of the Great Missenden by-pass from the B485 junction to the Deep Mill Lane turning. No larvae found once again. The small colonies that were found near to the Nags Head public house in 1999 and also along the A413 by-pass in 1998 have disappeared. Dark Mullein located along the South Bucks Way had been cut.

28.**Amersham and Shardeloes**

No larvae in 2000 and also none in 2005: 210 plants in 2000, 228 in 2005. No records since 13 larvae were found on a single plant in 1999. Plenty of foodplant (including some plantings along the Amersham by-pass), but no evidence of a colony.

29.**Chesham**

First found in 2003 with 2 plants located in a small field adjacent to Halfway House Lane. Very isolated from any other source and all “hay cut” in 2005.

30.**Holtspur**

118 larvae in 2000, 14 in 2005: 226 plants in 2000, 80 in 2005. An area in decline due to a number of factors. A good sized colony next to Holtspur Bottom nature reserve in Highwayman’s Farm was cleaned of foodplant after the 2000 survey and the few remaining plants support far fewer larvae. Large numbers on a single plant in Holtspur cemetery were not there in 2005. Further plantings of Dark Mullein will occur in 2006 at Holtspur Bottom to try and improve larval numbers in the area. With only 2 larvae found within the reserve, the notice board advertising Striped Lychnis presence is only just true.

Part of a notice board at Holtspur Bottom Reserve

31.**Cadsden and Rignall Road**

No larvae found in 2000 and none in 2005. 7 plants in 2000, 73 in 2005. Recent scrub clearance work on Grangelands has resulted in the appearance of Dark Mullein. However, overall plant numbers remain low in this area at the very extreme range of the foodplant. No larval records since surveying began.

32.**Great Hampden to Loosely Row**

No larvae in both 2000 and 2005: 3 plants in both 2000 and 2005.

33.**College Lake**

A new site with deliberate planting near to the entrance in 2004. 251 plants on the reserve and no larvae recorded.

34.**Burnham**

3 larvae in 2000, 25 in 2005: 69 plants in 2000, 312 in 2005. The larvae found at Hedgerly in 2000 were absent this year although numbers of foodplant had greatly increased. All larval records this time came from the chalk bank in Cliveden House grounds.

35.**Black Park**

A new site with 1 plant found and no larvae.

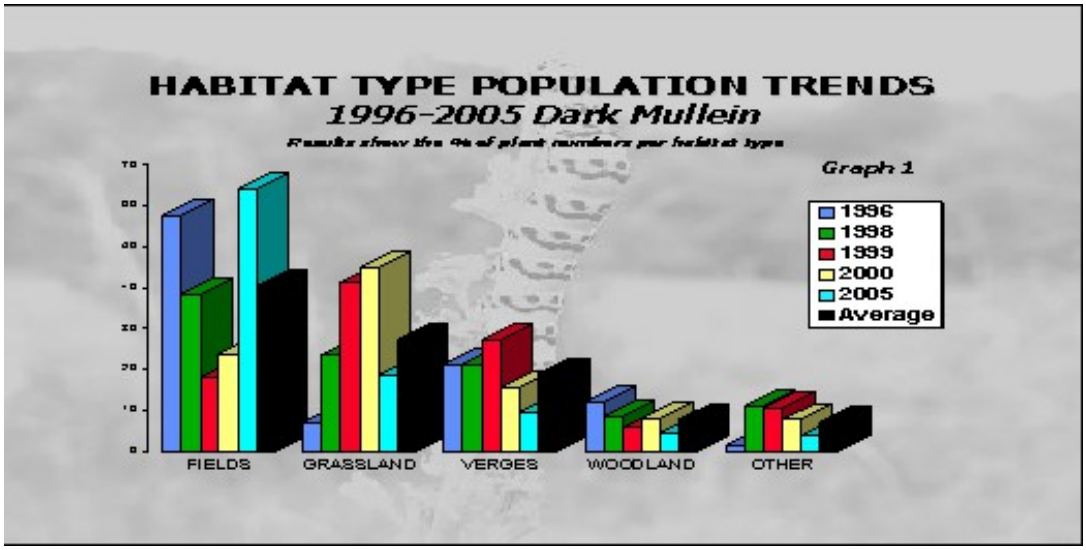
36.**M40 Motorway**

Un-surveyed again but likely to support both foodplant and larvae along the section from the M25 interchange to Stokenchurch.

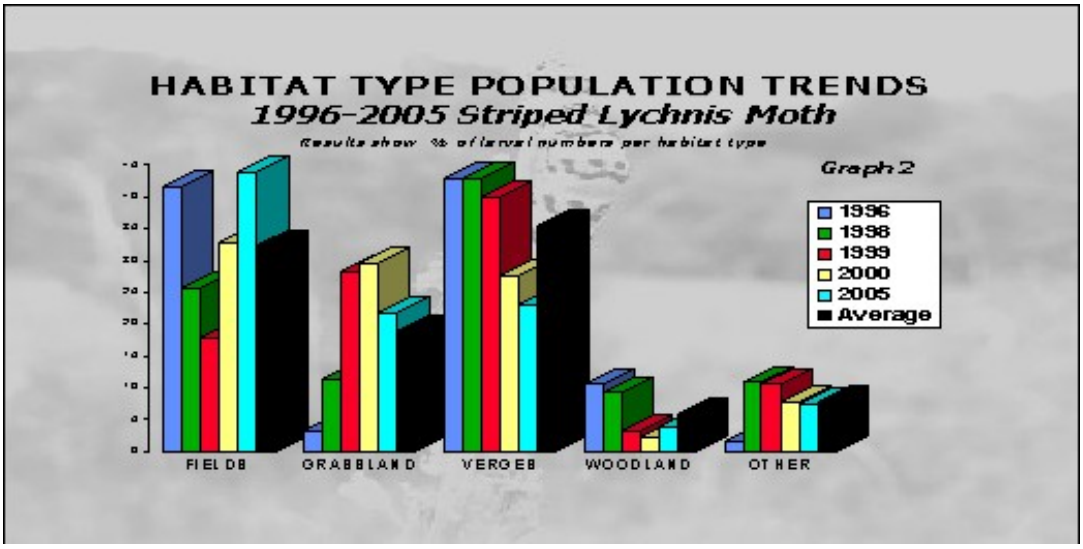
## The Graphs

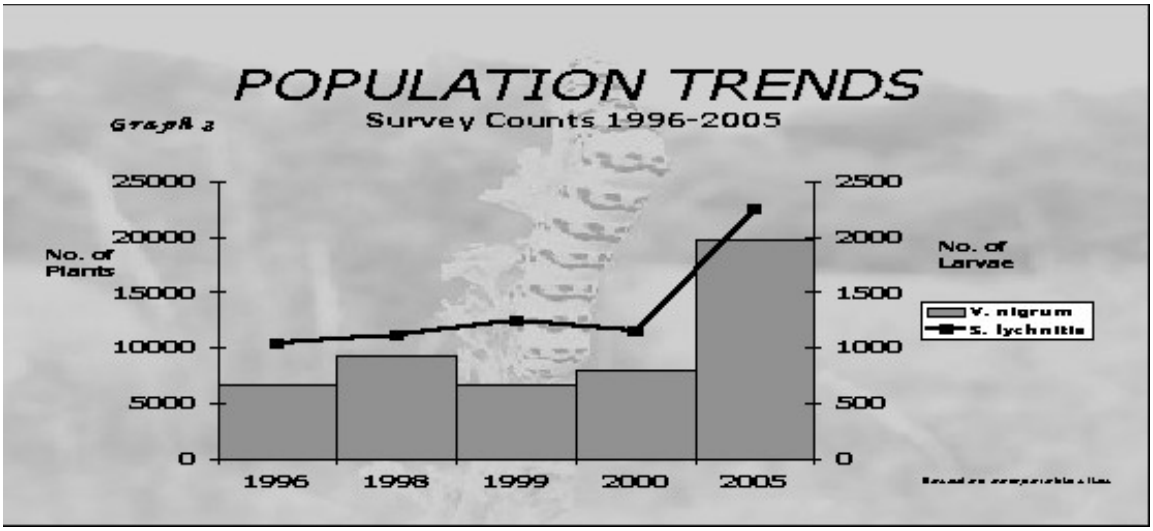
**The overall trends can be expressed graphically.**

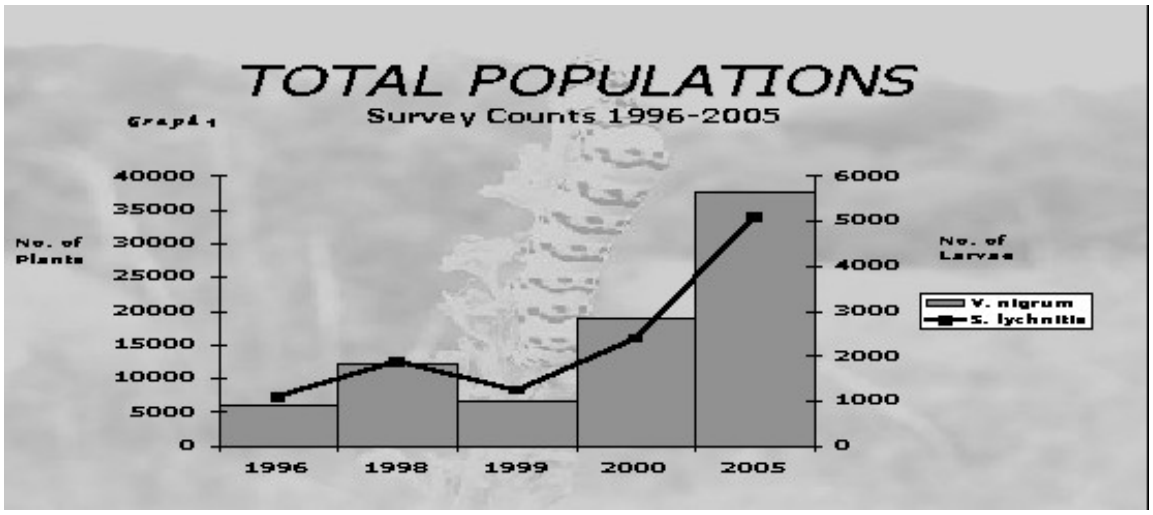
Graph Number 1 shows the numbers of plants found in each habitat group and how these have changed over the survey years. Only comparable sites have been chosen. It shows that roadside verges have declined in recent years whilst “Farm Fields” have fluctuated and show an increase this year on the long term average whilst “Chalk Grassland” after a steadily increasing from 1996 with each survey, has now declined.



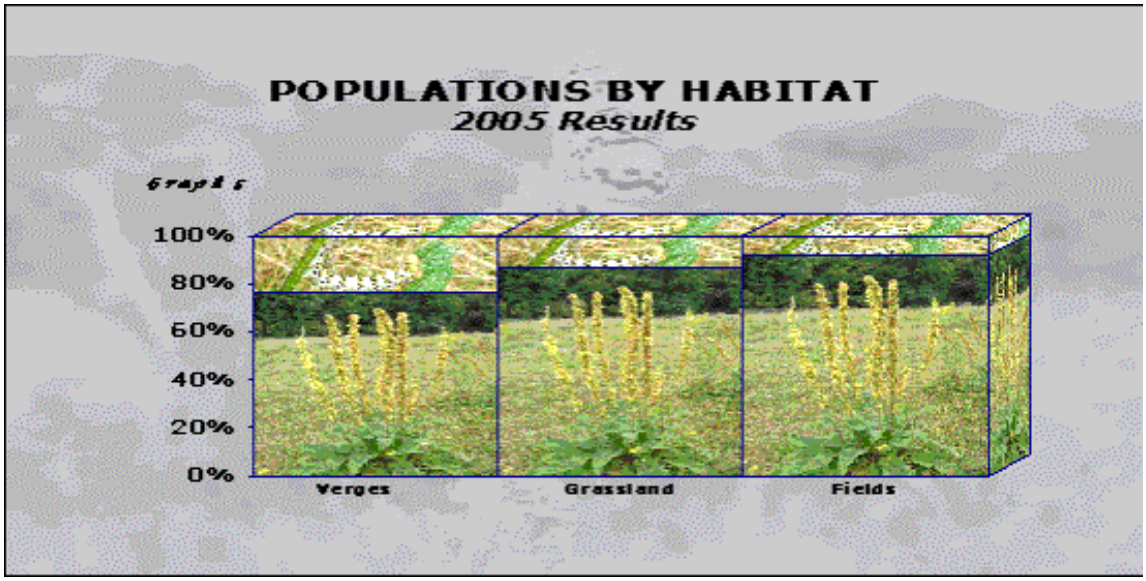

Graph Number 2 shows the larval trends. The long term average for “Roadside Verges” shows this habitat type to be the favourite, although recent surveys have shown this to be in steady decline. Verges now lie in second place behind “Farmland Fields”. Chalk Grassland sites are still performing above the long term average. In a year when larval numbers have increased, the decline of roadside verges is concerning.



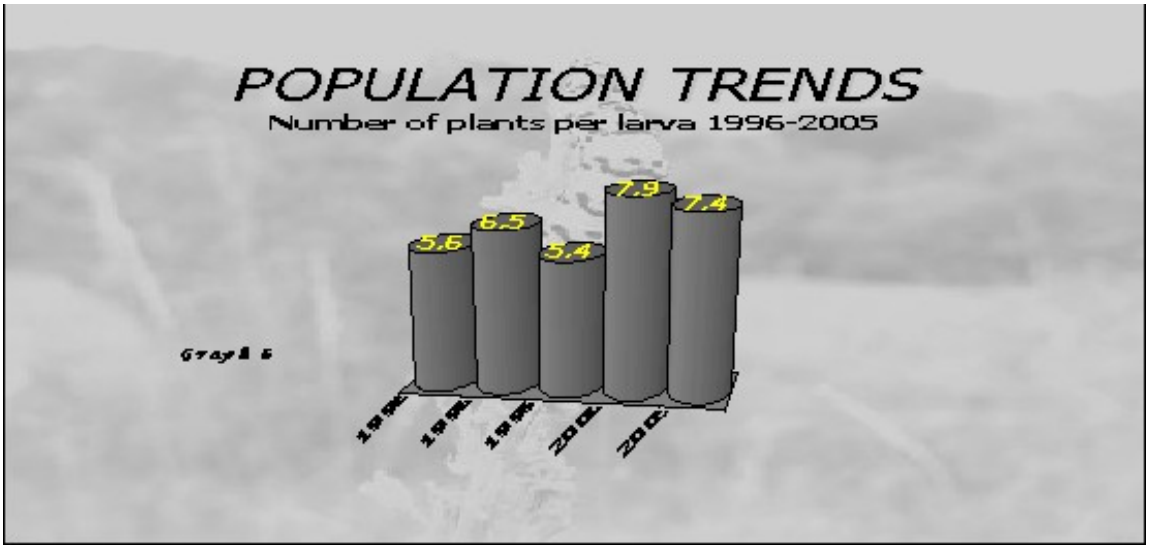



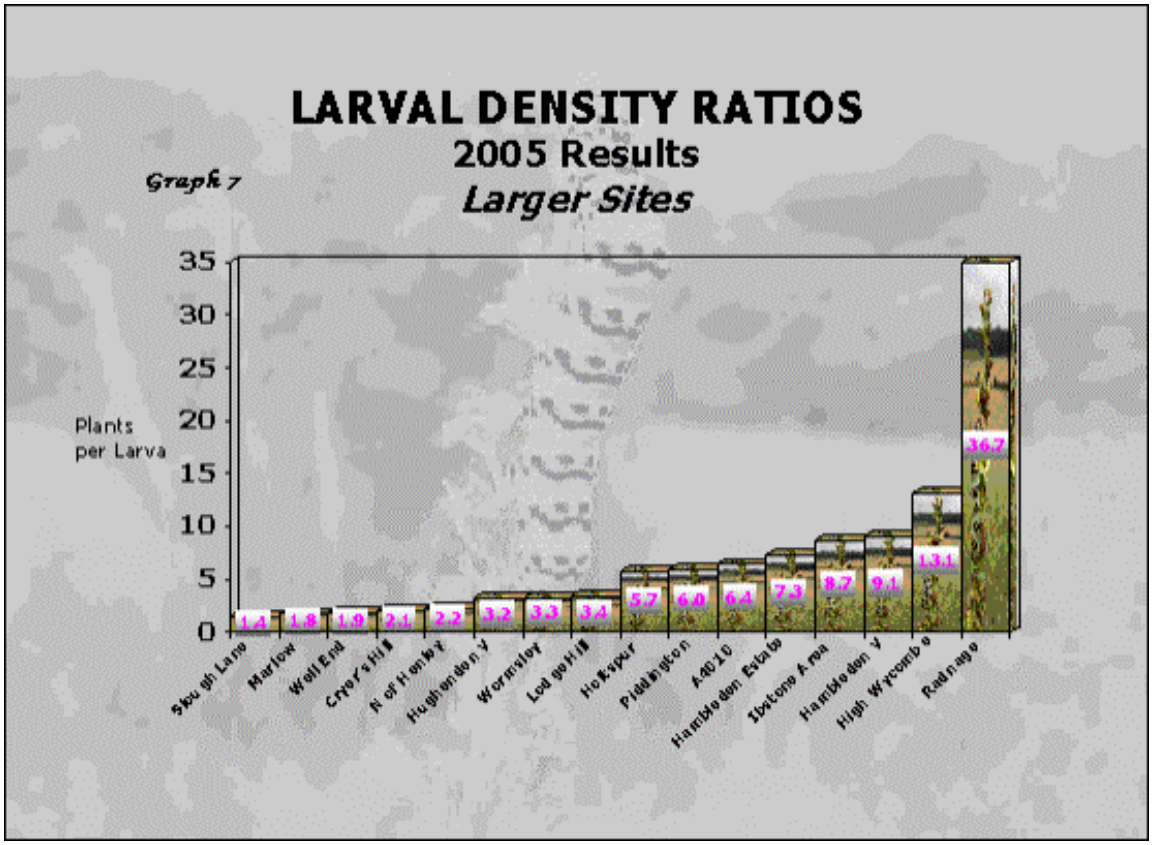

Graphs 3 and 4 show that there has been a significant increase in larval numbers with the 2005 survey. Graph 3 shows comparable sites and Graph 4 shows total surveyed numbers.




Graph 5 shows the ratio of larval numbers per plant for the three main habitat groups. It shows that Verges are still the preferred habitat with the best ratio of larvae per plant, followed by Chalk Grassland and then Fields and their margins.




Graph 6 shows the overall ratio of plants per larva. Results were very similar to 2000.




Graph 7 shows how popular the sites are with the moth. With the highest number of foodplant recorded, Sprig's Alley (Radnage) has the lowest density of larvae for any major site. Slough Lane has the highest larval densities.

## The Tables

### Table 1 Total Numbers of Larvae Recorded per Survey

| SITE AREA | NUMBERS OF LARVAE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2005 |
| Piddington/ West Wycombe (A40) | 182 | 16 | 82 | 240 | 230 | | | | 594 |
| W Wycombe to Saunderton (A4010) | 122 | 17 | 160 | 236 | 264 | | | | 192 |
| Cryer's Hill | 200 | | 438 | 134 | 136 | | | | 303 |
| Slough Lane/Buttler's Hangings | 12 | | 71 | 254 | 304 | | | | 223 |
| Bradenham and Small Dean Lane | 7 | | 5 | 9 | 2 | | | | 177 |
| Hughenden Valley | 92 | 1 | 19 | 89 | 28 | | | | 130 |
| High Wycombe | | | 11 | | 265 | 1103 | 363 | 924 | 742 |
| Speen to North Dean | 3 | | 0 | 2 | 16 | | | | 64 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Wormsley Estate** | | | | | | | 512 | | 213 |
| **Radnage** | 46 | 11 | 8 | 60 | 39 | | | | 289 |
| **Stokenchurch to Ibstone** | | | | | | | 115 | | 127 |
| **Swains Wood SSSI** | 7 | | 20 | 0 | 0 | | | | 8 |
| **Frieth** | 0 | | | | 5 | | | | 63 |
| **Lodge Hill SSSI** | 15 | | 13 | 136 | 75 | | | | 317 |
| **West Wycombe to Bledlow Ridge** | 0 | | 77 | | 1 | | | | 26 |
| **Homefield Wood Area** | 88 | | 51 | 10 | 30 | 31 | | | 14 |
| **Marlow Area** | | | 174 | 2 | 76 | | | | 287 |
| **Hedsor** | | | 18 | | 30 | | | | 2 |
| **Winchbottom Lane to Well End** | 38 | | 147 | 9 | 170 | 138 | | | 387 |
| **Hambleden Valley** | 242 | 55 | 113 | 17 | 163 | | | | 111 |
| **Hambleden Estate** | | | 347 | | 424 | | | | 517 |
| **Medmenham/Fawley Court** | 11 | | 99 | 16 | 8 | | | | 29 |
| **Henley to Stonor** | | | | | | | | | 177 |
| **Wendover** | 1 | | 0 | 0 | 0 | | | | 0 |
| **Bacombe Hill SSSI** | 0 | 0 | 0 | 3 | 9 | 4 | 70 | 34 | 44 |
| **Great Missenden** | 3 | 0 | 6 | 17 | 0 | | | | 0 |
| **Shardeloes/Amersham** | 0 | 0 | 0 | 13 | 0 | | | | 0 |
| **M40 Motorway** | | | | | | | | | |
| **Holtspur/Broad Lane** | 1 | | 53 | | 118 | | | | 14 |
| **Great Hampden to Looseley Row** | | | 0 | | 0 | | | | 0 |
| **Burnham** | | | | | 3 | | | | 25 |
| **Cadsden-Rignall Road** | 0 | | 0 | | 0 | | | | 0 |
| **College Lake** | | | | | | | | | 0 |
| ***Totals:*** | ***1070*** | ***100*** | ***1912*** | ***1247*** | ***2396*** | ***1276*** | ***1060*** | ***958*** | ***5075*** |

Table 2 shows the trends for sites that are comparable over the different survey years. Total numbers of plants have more than doubled since 2000. However, figures are distorted by Sprig's Alley (Radnage) and if this figure is removed, the results still show an increase but only 23% from 2000 to 2005. 11 of the 18 comparable sites showed increases in foodplant (61%).

## Table 2 Comparative Numbers of Plants Per Survey

| | *SURVEY YEAR* | | | | |
|---|---|---|---|---|---|
| **SITE GROUP** | **1996** | **1998** | **1999** | **2000** | **2005** |
| **Piddington/West Wycombe (A40)** | 375 | 660 | 575 | 1544 | 3564 |
| **West Wycombe to Saunderton (A4010)** | 180 | 357 | 1139 | 776 | 1235 |
| **Cryers Hill** | 500 | 150 | 86 | 136 | 141 |
| **Slough Lane/Buttler's Hangings** | 577 | 256 | 235 | 631 | 319 |
| **Small Dean Lane** | 165 | 65 | 30 | 29 | 32 |
| **Hughenden Valley** | 369 | 313 | 279 | 342 | 416 |
| **Clappins Lane/Little Stockings Wood** | 123 | 204 | 202 | 305 | 146 |
| **Radnage** | 2045 | 4083 | 1104 | 759 | 10620 |
| **Swains Wood SSSI** | 50 | 50 | 30 | 50 | 93 |
| **Lodge Hill SSSI** | 80 | 1500 | 1501 | 372 | 1065 |
| **Homefield Wood SSSI** | 402 | 293 | 80 | 66 | 131 |
| **Sentry Hill Area** | 72 | 100 | 67 | 128 | 70 |
| **Hambleden Valley** | 1126 | 160 | 167 | 815 | 1019 |
| **Medmenham to Fawley Court** | 8 | 384 | 177 | 190 | 191 |
| **Wendover** | 15 | 26 | 151 | 24 | 22 |
| **Bacombe Hill** | 40 | 500 | 300 | 1200 | 383 |
| **Great Missenden** | 65 | 91 | 134 | 225 | 84 |
| **Shardeloes/Amersham** | 254 | 110 | 357 | 210 | 228 |
| ***Total*** | ***6446*** | ***9302*** | ***6614*** | ***7802*** | ***19759*** |

Site Groups have been chosen that are comparable between the survey years

New group areas or expanded areas are not included

## Table 3 Comparative Numbers of Larvae Per Survey

| | *SURVEY YEAR* | | | | |
|---|---|---|---|---|---|
| **SITE GROUP** | **1996** | **1998** | **1999** | **2000** | **2005** |
| **Piddington/West Wycombe (A40)** | 182 | 82 | 240 | 174 | 594 |
| **West Wycombe to Saunderton (A4010)** | 122 | 160 | 236 | 264 | 192 |
| **Cryers Hill** | 200 | 438 | 134 | 136 | 303 |
| **Slough Lane/Buttler's Hangings** | 12 | 71 | 254 | 222 | 223 |
| **Small Dean Lane** | 7 | 5 | 9 | 2 | 11 |
| **Hughenden Valley** | 92 | 19 | 89 | 28 | 130 |
| **Clappins Lane/Little Stockings Wood** | 3 | 0 | 2 | 1 | 59 |
| **Radnage** | 46 | 8 | 60 | 36 | 213 |
| **Swains Wood SSSI** | 7 | 20 | 0 | 0 | 8 |
| **Lodge Hill SSSI** | 15 | 13 | 136 | 75 | 317 |
| **Homefield Wood SSSI** | 88 | 51 | 10 | 17 | 14 |
| **Sentry Hill Area** | 5 | 26 | 2 | 13 | 7 |
| **Hambleden Valley** | 242 | 113 | 17 | 163 | 111 |
| **Medmenham to Fawley Court** | 11 | 99 | 16 | 8 | 29 |
| **Wendover** | 1 | 0 | 0 | 0 | 0 |
| **Bacombe Hill** | 0 | 0 | 3 | 9 | 44 |
| **Great Missenden** | 3 | 6 | 17 | 0 | 0 |
| **Shardeloes/Amersham** | 0 | 0 | 13 | 0 | 0 |
| ***Total*** | ***1036*** | ***1111*** | ***1238*** | ***1148*** | ***2255*** |

Site Groups have been chosen that are comparable between the survey years

New group areas or expanded areas are not included

Table 3 shows the trends of larval numbers over the survey years. Larval numbers have increased by 98% between 2000 and 2005. For the sake of consistency, if Sprig's Alley is removed (Radnage) numbers have increased by 92%. 11 of the 15 comparable sites showed increases in larval numberst (73%). Sites where no larvae were recorded in both 2000 and 2005 were excluded.

## The Way Ahead

The overall picture is one of improvement. Road Verges are currently under discussion with the new Buckinghamshire Local Transport Plan 2006-2011, especially Road Verge Nature Reserves (RVNR's). It is hoped that this will provide a means to reverse the slow decline in larval numbers on road verges. Most critical stretches of road verge that have significant numbers of larvae and foodplant are already RVNR's. The B480 should come under consideration as an additional RVNR. Verge Cutting is also being reviewed. It is conceivable that RVNR's will require surveying annually to monitor proposed changes being put forward. Cab cards should be re-launched to make clear to cutting crews that the Dark Mullein plants is still to be avoided when cutting. It was clear from this survey that some RVNR's were cut at the wrong time and some verges had foodplant cut indiscriminately. Not all suffered this fate. It needs to be monitored.

Minor work involving planting will continue to take place. Areas under consideration are Bacombe Hill, Holtspur Bottom BBOWT reserve, the Aston Clinton by-pass, however such work is unlikely to alter populations greatly. Dark Mullein is an opportunist plant that likes disturbed soil. It is classified as a biennial and where it survives more than the 2 years its survival is not long term. It needs disturbance, so any degree of protection must bear this in mind. It seems likely that surveying every 5 or so years should highlight any major trends, whether up or down, in time to plan any action necessary to ensure its survival long term. Currently, it is doing very well.

Peter Hall

November 27th 2005