



## **Moths of Poole Harbour: A Project of Birds of Poole Harbour**

### **Southern Chestnut (*Agrochola heamatidea*) in Poole Harbour 2017-2019**

The Southern Chestnut was discovered in the UK, in West Sussex in 1990. It was known from a single site until 1996 when it was found in the north-west of the New Forest and since then has become known from the East Dorset Heaths especially around Hurn.



*Fig. 1 Southern Chestnut, Arne Moors, October 2018*

The species is classified as Red Data Book 2. There is general consideration that the species may in fact be a long-overlooked resident rather than a recent addition to the fauna of Britain.

The species flies from early October to mid-November and the larvae feed on Bell Heather and Cross-leaved Heath. One of the main behavioural features is that the moth seems to come readily to light, with the main flying period being less than an hour after dark. For this reason it is a fairly straightforward species to look for.

On 5<sup>th</sup> October 2017 a single individual was found in a trap at Goathorn. Uncertain as to the identity the moth, due to the fact its potential presence in the Harbour wasn't on the radar, it was taken home and kept in a fridge overnight. The following day the identity was confirmed and the moth returned to Goathorn that evening. En route to Goathorn the second evening, traps were put out on the heathland at Holton Lee, and upon return the surprise find was a second Southern Chestnut.

Subsequent trapping at both these localities in October 2017 and 2018 revealed further occurrences of the species. Indeed the maximum count on Goathorn was of 12 individuals on 4<sup>th</sup> October 2018. On this occasion it was the second most numerous species recorded, after Large Yellow Underwing.

The species seems easy to attract to light and to survey and a single visit to Slepe Heath on 14<sup>th</sup> October 2017 confirmed suspicions that it was now well-established on the Purbeck Heaths and may potentially be across the whole area on suitable habitat.

**Table 1. Records of Southern Chestnut by site**

<b>SITE</b>	<b>TIMES RECORDED</b>	<b>NUMBER RECORDED</b>	<b>YEAR RECORDED</b>
Goathorn	4	19	2017 & 2018
Holton Lee	2	4	2017
Arne Moors	1	1	2018
Carey Estate	1	1	2019
Slepe Heath	2	5	2017 & 2019
Canford Heath	1	15	2019
Hartland Moor	1	1	2019

Subsequently the moth was found again at Goathorn in 2018. Also in that month one was found away from the heaths (though in close proximity) at Arne Moors. This record coupled with one from Carey Estate near Wareham, where there is no heathland habitat, in late October 2019, suggests that the species is in fact quite mobile and lends credence to the theory that most heathland habitats may support the moth.

**Table 2. All records of Southern Chestnut 2017-2019**

Date	Goathorn	Holton Lee	Slepe Heath	Arne Moors	Carey Estate	Hartland Moor	Canford Heath
5/10/2017	1						
6/10/2017		1					
10/10/2017		3					
12/10/2017	3						
14/10/2017			3				
2/10/2018				1			
4/10/2018	12						
18/10/2018	3						
2/10/2019			2			1	
16/10/2019							15
20/10/2019					1		

Elsewhere we have been told of occurrences of Southern Chestnut in a private garden in Sandford in 2018 (Brian Pickess pers. comm.) and at the offices of Footprint Ecology at Coldharbour (Durwyn Liley pers. comm.). This latter site is outside the Moths of Poole Harbour recording area but supports the feeling that the moth is widely distributed.



*Fig. 2 Abby photographing 3 Southern Chestnuts in the hide at Holton Lee, October 2017*

On 27<sup>th</sup> September 2019 Luke Phillips ran traps on the heath at Arne RSPB reserve but did not catch any Southern Chestnuts. However it is conceivable that this date was just too early in the season. 5 days later a co-ordinated effort to find the species again at Slepe Heath for where the species is known, also running traps at Hartland Moor where it was previously

not recorded, did find the species at both locations but only 3 individuals. This suggests the start of the flight season and may explain the apparent absence from Arne.

A subsequent visit to Canford Bottom (Canford Heath) on 16<sup>th</sup> October 2019, with Chris Fox and Joe Parker recorded Southern Chestnuts from all 5 traps deployed and indeed in a short trapping session (less than 2 hours) it proved to be the most numerous species recorded that evening with a total of 15 individuals.

Although the species was not recorded at Studland during the Cyril Diver Project 2010-2013, that may reflect the lateness of the year and it is possible that the species was therefore overlooked.

It is expected that additional trapping across the Purbeck Heaths will reveal additional locations for Southern Chestnut. Indeed given the apparent mobility of the species it seems highly likely that the species may be across all the heaths. October is not a month many people are recording moths on the heaths and since 2017 it has been found on all the heaths sampled during the month of October.

## **Acknowledgements**

The Moths of Poole Harbour would like to thank site owners for access. Thanks also to Chris Fox, Joe Parker, James Lowen, Durwyn Liley, Peter Moore, Phil Saunders, Zoe Caals, Will Soar, Marcus Lawson, Terry Elborn and Karl Clennell for help and company in the field.