

LUNDY BUTTERFLIES

by

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ABSTRACT

All extant butterfly records have been extracted from the Lundy Field Society Annual Reports and logbooks from 1946 to 2023. To these have been added listings from published accounts to produce a definitive list for future reference and comparison. There are no rare or endemic species, but occasional unusual visitors are reported.

Keywords: *Lundy, butterfly, Lepidoptera, transect*

INTRODUCTION

Species of butterfly on Lundy

Currently, there are 59 species of butterflies in five families recorded in the United Kingdom. In contrast, Lundy has had up to 34 species in three families. At present there are 22 species that can regularly be found on the island.

The earliest record of Lundy butterflies was the mention of a Painted Lady *Cynthia cardui* by Wollaston (1845) and “a moth”. This list was expanded by John Robert Chanter’s (1877) list of 21 species including the Large Tortoiseshell *Nymphalis polychloros*, now extinct in UK, and some more localised fritillaries; Chase later listed four butterflies (1894) which was expanded by Longstaff (1907) to 18 species. In Loyd’s (1925) book, he repeated Chanter’s list which was forwarded to him by the owner of the island at that time, H.G. Heaven. The final listing was in Palmer (1946) which in his account of butterflies of the Ilfracombe area in North Devon also identified those seen on Lundy. His list contains a different range of 20 species.

The first record of named butterflies in the Lundy Field Society (LFS) Annual Report was in 1967 when C Garret-Jones stayed on Lundy from 6th to 9th July 1968. He reported only five species (AR Vol 19).

When Nick Dymond was employed as warden in 1972, he began systematically to list his sightings throughout the year and in the 1972 Annual Report (Dymond Vol 23 AR). His list is very similar to the current one. He notes the first records of Holly Blue *Celastrina argiolus* and also the absence of Comma *Polygonia c-album*, Clouded Yellow *Colias croceus*, and Orange Tip *Anthocharis cardamines* and, the now extinct on Lundy, Pearl-bordered *Boloria euphrosyne* and Small Pearl-bordered Fritillary, *B. selene* and Heath Fritillary, *Melitaea athalia*. Some of these species and Speckled Wood remain as unusual sightings that would be welcome entries in our logbook. Others remain extinct:-

- **Large Tortoiseshell** Extinct in UK c1950 Chanter 1877, Chase 1894, Longstaff 1901, Loyd 1925, Palmer 1946

- **Small Pearl-bordered Fritillary** Extinct on Lundy: Chanter 1877, Longstaff 1907, Loyd 1925, Palmer 1946
- **Pearl-bordered Fritillary** Extinct on Lundy Chanter 1877, Longstaff 1907, Loyd 1925, Palmer 1946
- **Heath Fritillary** Extinct on Lundy: Chanter 1877, Chase 1894, Loyd 1925, Palmer 1946

METHODS

Butterfly Records from past LFS reports

Butterfly records extracted from the Lundy Field Society Annual Reports and logbooks from 1946 to 2023 are presented in the figures in the text as bar charts in which yearly occurrence on Lundy in each year has been simplified into categories of relative abundance. The scale on the Y axis was derived from the recorded numbers, which fluctuated between 0 and to more than 500 and is explained in Table 1.

Table 1: Scales used in the bar charts of yearly records of Butterflies on Lundy (figures 2-20).

Yearly records	Y axis scale
Listed as “present”	present
One sighting on one date (rare)	singles
2- 9 sightings (occasional)	few
10-99 sightings (common)	common
100 or more sightings (abundant)	abundant

Recording effort began in 1968. There are year gaps where species were not recorded. There has only been a consistent effort to record butterflies in more recent years and in some of the earlier years, for example 1969 to 1971 and 1974 to 1978, 1982, 1985 and 1991 there are no records of butterflies either in the *LFS Annual Report* or in any existing logbooks. Such absence was presumably due to lack of recorders rather than of butterflies.

The Lundy Butterfly Transect


In 2019, together with the then warden, Dean Jones, I established a butterfly transect on the island covering typical habitats: the only wooded area, rough gorse and grassland, former Rhododendron planting on the sheltered eastern side and on the plateau. This will result in more consistent recording and will yield much better data in future. This uses the standard methods recommended and accepted by UK Butterfly and Moths Society (see figure 1 and table 1). All records are automatically recorded on iRecord.

Some effort has been made to walk the transect regularly, but COVID had an impact, as has the recent re-establishment of the island as a bird observatory. Island and observatory staff have a huge workload and to regularly walk the transect relies heavily on volunteers from the staff and visitors.

The transect commences at Millcombe Pond and its nine sections wind up through Millcombe valley and the only wooded area on the island to follow the Upper East Side

Path along the crest of the eastern sidelands. Each section is marked by easily identified landmarks and terminates on a final section from the east side to the middle of the island. After around 1500 metres and a walk of one hour the transect ends at Quarter Wall gate.



Figure I: Route of the Butterfly transect on Lundy (reproduced with permission from the UKBMS).



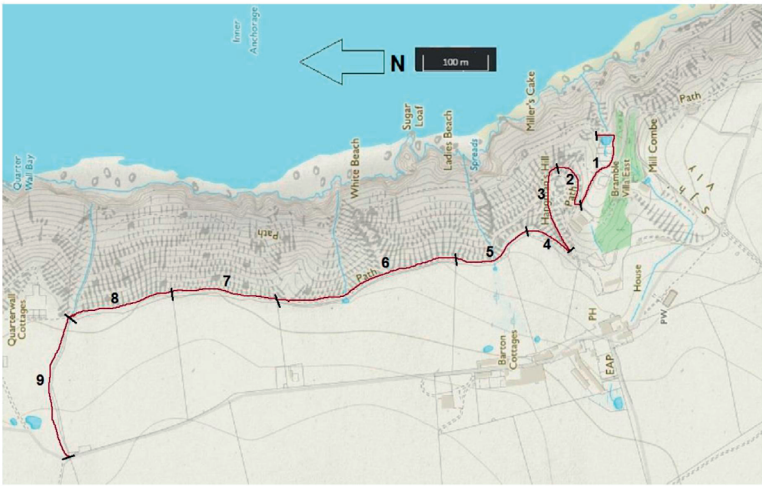
F1(S): BUTTERFLY TRANSECT DETAILS FORM (SMALL SITE)

DETAILS OF RECORDER, HABITAT, MANAGEMENT & ROUTE MAP

Please fill in this form as fully as possible, with reference to Guidance Notes G3 & G4



SITE NAME	LUNDY Upper East Side			COUNTY	DEVON		
OS GRID REF. (6 FIG.)	SS136440	OS MAP NO. (1:50 000)	180	YEAR TRANSECT ESTABLISHED	2019		
TRANSECT LENGTH (M)	1440	TRANSECT WIDTH (m) (tick one)	5	6	10	<input checked="" type="checkbox"/>	OTHER
OVERALL HABITAT DESCRIPTION	Coastal Cliffs/undercliffs, bracken hillsides				HAB. CODE(S)	B3, E5.3	
LAND USE (if the transect is on a disused industrial site indicate type)	RAILWAY	QUARRY	PIT/MINE	OTHER (add to notes)			
SITE'S CONSERVATION STATUS	SSSI		TYPE OF RECORDER	M			
RECORDER DETAILS	Dean Woodfin Jones (Wildlife Warden)						
OWNER DETAILS	National Trust/Landmark Trust						



SECTION DETAILS:			HABITAT		MANAGEMENT	
Section Number	Grid Ref.	Length (m)	Description/notes & main species	Code(s)	Description/notes	Code
1	SS13994405	155	Trees. Unimproved grassland, allotment, walls with ferns- Ivy-leaved Toadflax, Wall Pennywort, Fushia, Common Valerian		Paths are kept trimmed, Goats graze, trees are managed.	M3
2	SS13974409	100	Few trees, predominantly Gorse and bare rock			M3
3	SS13924412	152	Gorse, mixed woodland, Bluebell dominates in season			M3
4	SS13884412	83	Gorse, rough grassland mixed woodland			M3
5	SS13854422	138	Gorse, rough grassland, Bracken, Bluebells, coastal		Formerly Rhododendron dominated, but now Bracken, Bluebells and Gorse.	M4
6	SS13814443	293	As Section 5, to the east, improved grassland			M4
7	SS13824465	167	As Section 6		Paths are mowed, regrowth of Rhodi is sprayed, formerly burnt	M4
8	SS13804480	122	As Section 7			M4
9	SS13694492	230	Rough moorland some gorse damp areas with Juncus		Grazed by Cattle and Ponies	M1

By submitting these records you confirm that they contain data that you have collected, give permission for the records to be used for research, education and public information, and to be made generally available for re-use for any other legal purpose under the terms of the Open Government Licence (<http://www.nationalarchives.gov.uk/doc/open-government-licence/>), and agree that your name will be associated with the record.

Section	Detailed description
1	The transect commences at SSI404405, on the north side of Millcombe Pond. Walk south to the road and then right up the hill, through Millcombe gates until you almost reach the house
2	At the first grassy path SSI3934408 on your right, turn east passing the bench and sundial. The path continues upwards until you reach the Ugly
3	From the Ugly SSI3984411, turn west inland, passing the steps to the Lower East Side Path and continuing under the trees towards the steps that climb Millcombe Valley to the Village.
4	Ascend the few steps at SSI3844409, to the bench dedicated to David Trapnell and turn along the path which leads north along the field boundary.
5	At the wooden field gate SSI3894416 continue north along the Upper East Side path which follows the field boundary
6	At the Boundary of Barton's Field and Tillage Fields SSI3834455, continue north along the Upper East Side path which follows the field boundary
7	At the boundary of Tillage Field and Brick Fields SSI3854428, continue north along the Upper East Side path which follows the field boundary
8	At the post and wire fence that divides Brick Field SSI3824472, continue north along the Upper East Side path which follows the field boundary
9	At the wooden gate in the fence at end of Quarter Wall SSI3794488, turn west and follow the field boundary to Quarterwall gate on the main track where your transect ends. SSI3574489
	The End Roughly 1 ½ Km length and one hour in time

Table 2: Descriptions of the sections of the Lundy Butterfly transect.

RESULTS

A spreadsheet of all records extracted from the LFS Annual Reports from 1947 to 2023 is available on the LFS website. This raw data can be downloaded from this location:- https://www.lundy.org.uk/images/downloads/Journal_9_Butterflies_analysis.xlsx

In the species accounts below, the earliest and latest dates of sightings on Lundy for each year have been extracted together with the highest number seen on one day. The bar charts show year by year abundance of the species. A photograph of each species taken on Lundy is included where this exists. Where no photograph is available from Lundy, a mainland photograph has been used. The origin of each photograph is also indicated. Nomenclature follows Eeles (2019).

HESPERIDAE: Skippers

Large Skipper *Ochlodes sylvanus*

The Large Skipper is common throughout England and Wales but is rare on Lundy. Only one example has been recorded by Roger Key on 9th June 1995 at the Quarries. Although this is an undisputed record, due to the expertise of the recorder, it is the only recorded sighting. No sightings are listed in Chanter, Loyd or Palmer. This small brown



Plate 1 Large Skipper photographed in North Cornwall ©Alan Rowland.

butterfly is unmistakeable with crossed wings and yellow chequer-board patterned wings. It is common on unimproved grassland and adults can be seen on the mainland from late May to early August.

The adult's food plants are Brambles *Rubus* spp.. and Thistles *Cirsium* sp. whilst the larvae prefer grasses, in particular Cocksfoot *Dactylis glomerata* and should therefore be at home on Lundy. It is classified as a Lundy rarity.

Silver-spotted Skipper: *Hesperia comma*

The Silver-spotted Skipper was recorded once on Lundy on 2nd September 1981 by an unknown observer who recorded two. It is a very localised and rare species found on chalk downland in southern England. The flight period of adults is August. This record is highly doubtful, cannot be confirmed and no sightings are listed in Chanter, Loyd or Palmer.

PIERIDAE:Whites

Orange Tip: *Anthocharis cardamines*

Males of Orange Tips are unmistakeable as the only white butterfly with orange tips to its wings. Females lack this marking so are not so easily identifiable unless the green mottled underwing can be seen. It is one of the earliest spring butterflies to be seen flying from early April to the end of June. It is very much a hedgerow species, a habitat that Lundy lacks. There are seven records of this species from Lundy, two in 1997, singletons in 2007, 2014, 2017 and 2019 and six in 2018 and five in 2023. It was reported from late April to early August with one rogue sighting in October which is probably a misidentification. It was first reported by Chanter in 1877, and again in 1907 by Longstaff, and in 1946 by Palmer. It must remain a Lundy rarity.

Adults and larvae depend on Cabbage family *Brassicaceae* for food with larvae preferring Cuckoo Flower *Cardamine pratensis* which is rare on Lundy or Garlic Mustard *Alliaria petiolata* which has not been reported so far.

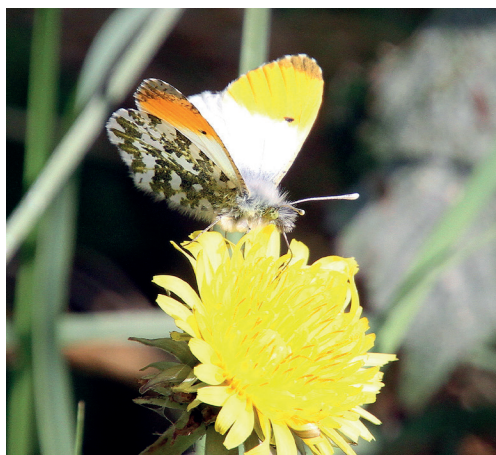


Plate 2 Orange Tip, photographed in North Cornwall. © Alan Rowland.

Large White: *Pieris brassicae*

This species is easily confused with Small and Green-veined White and female Brimstones. Size is not a determining factor. The best identifier is the black tip to the wings which are more extensive than those of the Small White and tend to wrap along both edges of the wing. The underwing is not as yellow as that of the Small White. It is bivoltine and can be seen flying from mid-April to late June and again from late July to the end of September.

Adults feed on a wide range of plants but the larvae depend on the Cabbage family *Brassicaceae* and Mignonette family *Resedaceae* which are abundant on Lundy and

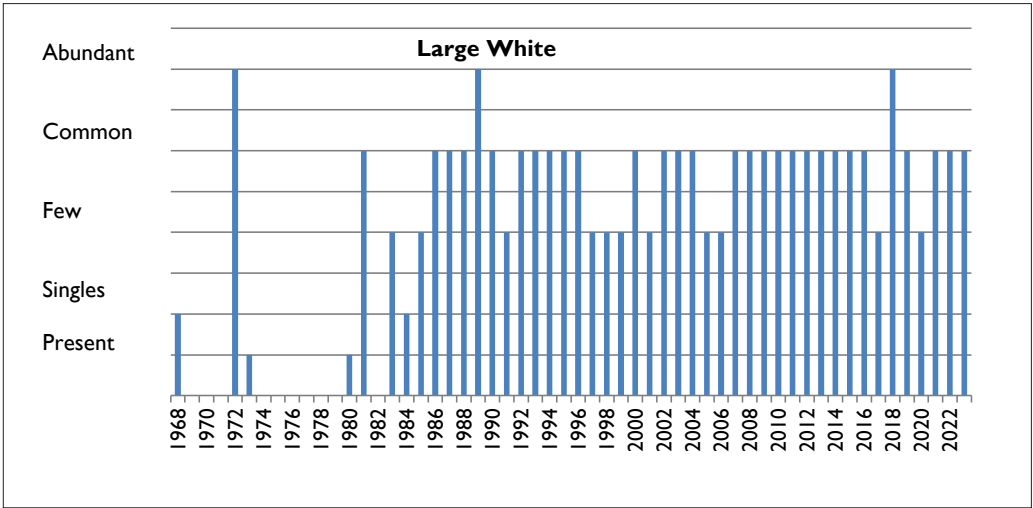


Figure 2: Large White abundance/year.

include Lundy Cabbage, *Coincya wrightii* and Wild Mignonette, *Reseda lutea* which does not occur on Lundy. It is one of the commonest butterflies reported from Lundy and has been seen from 1877, when it was called the Cabbage White, to the present day. It can be extremely abundant and numbers often rise to three figures when there is an eruption from the continent.

Plate3: Large White, photographed on Lundy © Alan Rowland.



Small White: *Pieris rapae*

This species is easily confused with Large and Green-veined Whites and female Brimstones. Size is not a determining factor. The best identifier is that Small Whites are more lightly marked on the corner of the upper wing and the underwing is distinctly yellow. It is very abundant and can be recorded in all months from March to November with peaks during the two breeding seasons of May/June and late July to early September. Like the Large White, numbers can increase dramatically when there is an influx from the continent. It was first reported on Lundy by Loyd (1877) and has been recorded from as early as April and



Plate 4: Small White, photographed in North Cornwall © Alan Rowland.

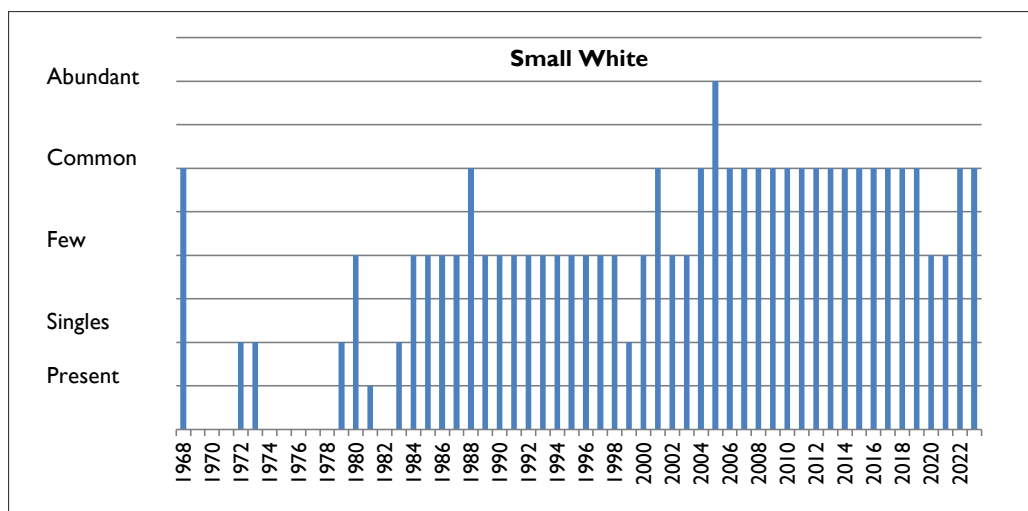


Figure 3: Small White abundance/year.

as late as November. It is one of the most abundant butterflies with around 500 being reported in the peak year of 1995.

The adults are as catholic in their food plants as the Large White and the larvae similarly depend on Cabbage family *Brassicaceae*, Mignonette family *Resedaceae* and Nasturtium family *Tropaeolaceae*. On Lundy food plants include Lundy Cabbage, *Coincya wrightii*, Nasturtiums, *Nasturtium officinale* agg. and various Water Cresses.

Green-veined White: *Pieris napi*

If the underwing can be seen there is no mistaking this otherwise easily confused species. With more experience, the green underwing can also be discerned through the upper wing. It was first recorded by Loyd in 1877 and since modern recording began on Lundy has been present in almost all years as one of the most common butterflies. Unlike the Large and Small Whites, this species does often settle and allow easier recognition. It flies from mid-April to mid-November and has been reported from Lundy from April to October. It is bivoltine and ubiquitous throughout the UK in almost any habitat.

The adults feed on a wide variety of plants, but the larvae depend on Cabbage family *Brassicaceae* plants in particular, Charlock, Cuckooflower, Garlic Mustard and Water-cresses all of which, with the exception of Garlic Mustard, grow on the island.



Plate 5: Green-veined White, photographed in North Cornwall © Alan Rowland.

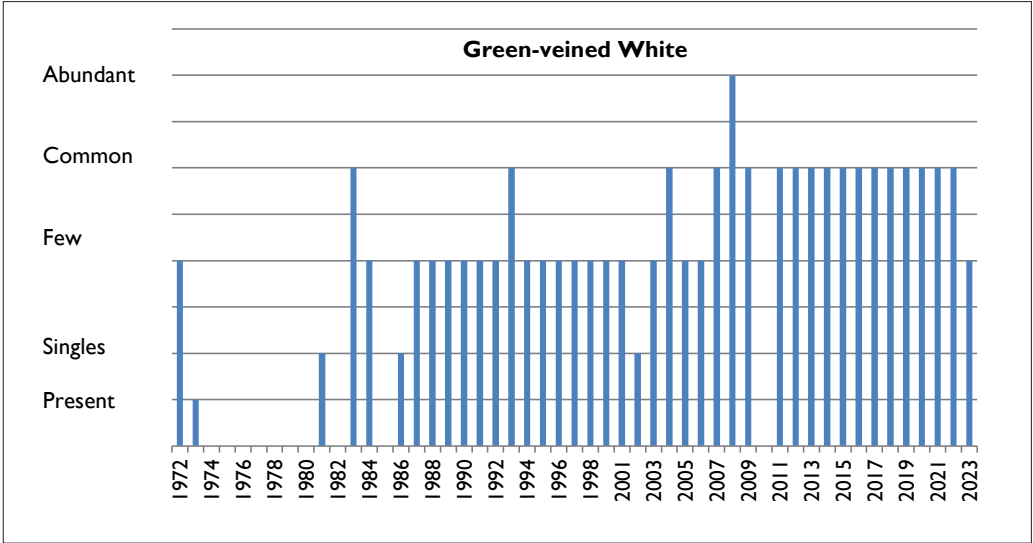


Figure 4: Green-veined White, abundance/year.

Clouded Yellow: *Colias croceus*

There is no mistaking a Clouded Yellow butterfly with its very chrome yellow wings. This is a highly migratory species which reaches the UK each year, but around once in a decade there is an irruption, when the species is abundant. It is during these bountiful years when

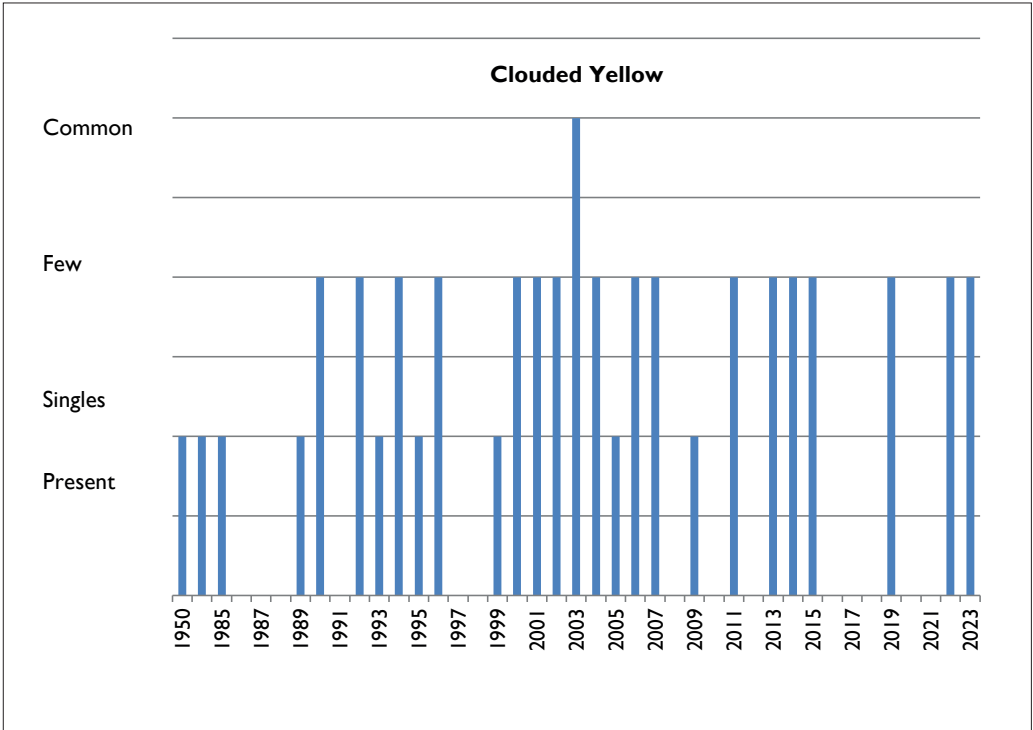


Figure 5: Clouded Yellow abundance/year..

they are recorded on Lundy. When they do breed in the UK, they are bivoltine and can be seen flying in May, in August and October/November. Reports from Lundy cover all the months from May to October. The first record was in Longstaff (1907).

Adults feed on a wide variety of plants, but larvae need the Pea Family *Fabaceae*, especially Clovers *Trifolium spp.*, Lucerne *Medicago sativa* and Bird's-foot Trefoil, *Lotus corniculatus*, all of which, with the exception of Lucerne, are common on Lundy. It is one of Lundy's most uncommon species appearing intermittently and rewards those who are fortunate to be on the island when they make a visit.



Plate 6: Clouded Yellow photographed on Lundy © Neil & Shaun Barnes.

Brimstone: *Gonepteryx rhamni*

This is the species from which the word “butterfly” is thought to originate. The large male has butter yellow wings with a distinctive brown mark on the underwing. The female is coloured pale yellow or even greenish and could easily be confused with the Whites although the leaf-shaped wings are distinctive. Despite being common in the southern half of Britain, it has rarely been seen on Lundy. It is univoltine, but long-lived and can be seen in the UK in all months of the year. Not so on Lundy, when it has only been recorded in August 1999, June 2000, April 2007 and from April to July in 2022. Apart from 2007 when three were seen, records were of single butterflies, although on four different dates in 2022. The earliest record was in Loyd (1877) and again in Longstaff (1907) and Palmer (1946).



Plate 7: Brimstone, photographed in North Cornwall © Alan Rowland.

The adult is well catered for on Lundy with a preference for a wide range of purple or blue flowers. However, the larvae are fully dependent on Buckthorn *Rhamnus sp.* or Alder Buckthorn *Frangula alnus*, both in the Buckthorn family *Rhamnaceae*, neither of which grow on Lundy.

NYMPHALIDAE: Nymphalids, Fritillaries and Browns

Wall: *Lasiommata megera*

This is one of the species on the GB Red List and noted as Near Threatened and as such is at risk. It has bright golden wings and is usually quite active only settling to display its black and gold wing panels when investigating bare earth for essential minerals. It prefers open

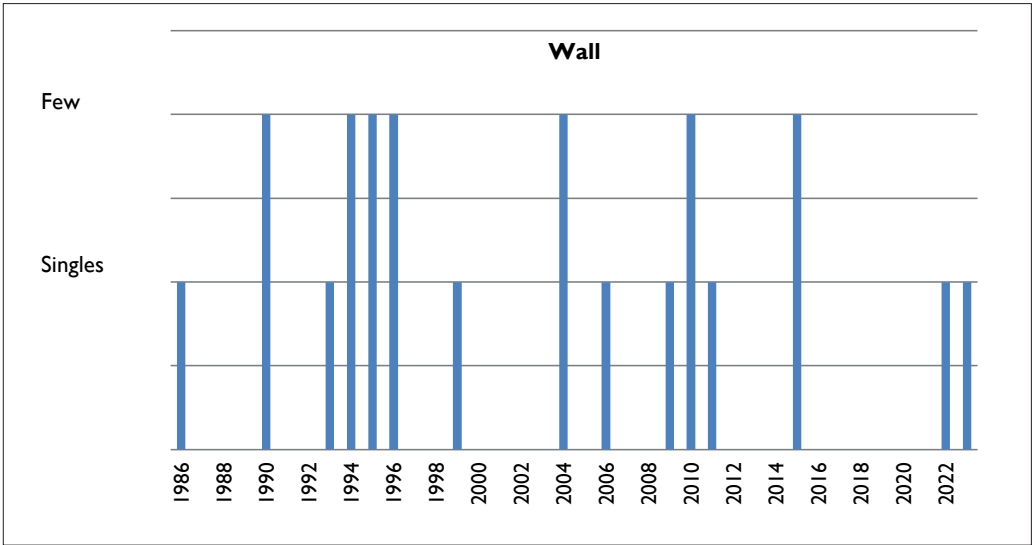


Figure 6: Wall, abundance/year.



Plate 8: Wall, photographed in North Cornwall © Alan Rowland.

cliff top grasslands and walls (hence the name) and should therefore be at home on Lundy. It is bivoltine with adults on the wing from May to June and again between August and early November. It has been recorded on Lundy from April to October albeit only in ones and twos at the most, making it one of Lundy's rarer butterflies. Figure 6 shows that it was first recorded in 1986, there being no earlier records in the historic literature. What caused this colonisation is unclear, but Newland & Hill (2010) confirm it is expanding its range northwards and demonstrably westwards.

Whilst adults feed on a wide variety of plants, the larvae depend on specific grasses mostly, Cock's-foot *Dactylis glomerata*, Tor-

grass *Brachypodium pinnatum*, Wavy Hairgrass *Deschampsia flexuosa* and Yorkshire-fog *Holcus lanatus*, which, with the exception of Tor grass, occur widely on Lundy.

Speckled Wood: *Pararge aegeria*

This is one of the commonest butterflies on the mainland and the flash of yellow from the upper wings is unmistakable. However, like the Wall, it did not colonise Lundy until comparatively recently. No historic records exist before 1979. On the mainland it is ubiquitous where there are trees and is seen from late March to Early October. It can have three breeding cycles. The sparseness of tree cover may be why it colonised the island so recently and why there are so few sightings. Except for 2003, when a total of 10 individuals were counted, all

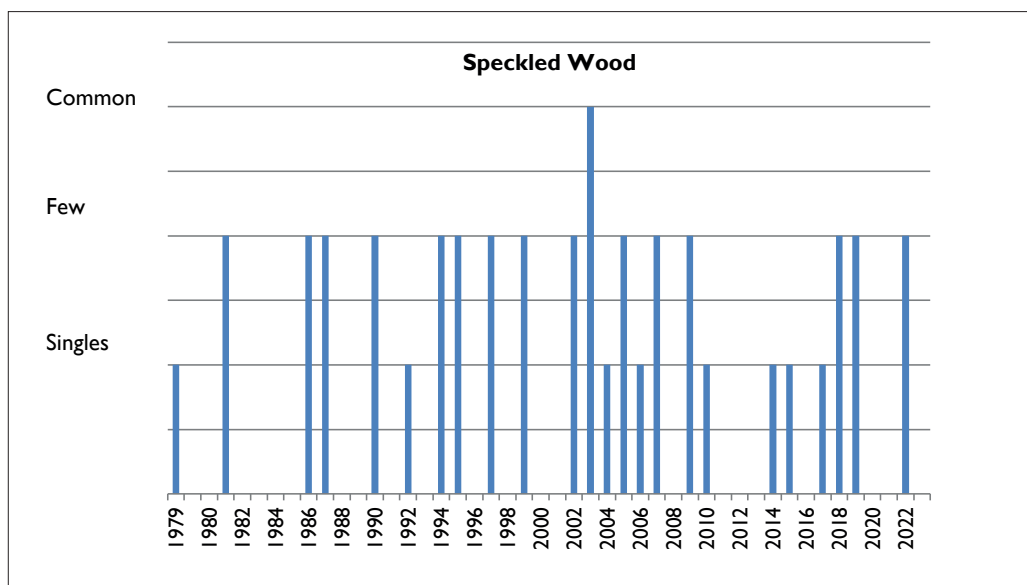


Figure 7: Speckled Wood, abundance/year.

other sightings were of one or two individuals. On Lundy it has been recorded in all months between March and October. It is therefore one of Lundy's rarer butterflies.

Adults feed high in the trees on Aphid Honeydew on Ash, Birches and Oaks but when these are not available, on Ragwort *Senecio jacobaea* itself common on Lundy, though under threat of removal. The larvae are grass specialists feeding on Cock's-foot *Dactylis glomerata*, False-brome *Brachypodium sylvaticum* and Yorkshire Fog *Holcus lanatus*.

Small Heath: *Coenonympha pamphilus*

This is one of the Butterfly species on the GB Red List and noted as Near Threatened and as such is at risk although doing quite well on Lundy and has featured in the list of Lundy butterflies since being first recorded by Chanter (1877). It is the smallest of the "brown" butterflies and rarely settles with open wings. They are a variable washed out brown in colour but with a distinct black spot with a white centre on the upper



Plate 9: Speckled Wood, photographed on Lundy © Mandy Yates.



Plate 10: Small Heath, photographed on Lundy © Alan Rowland.

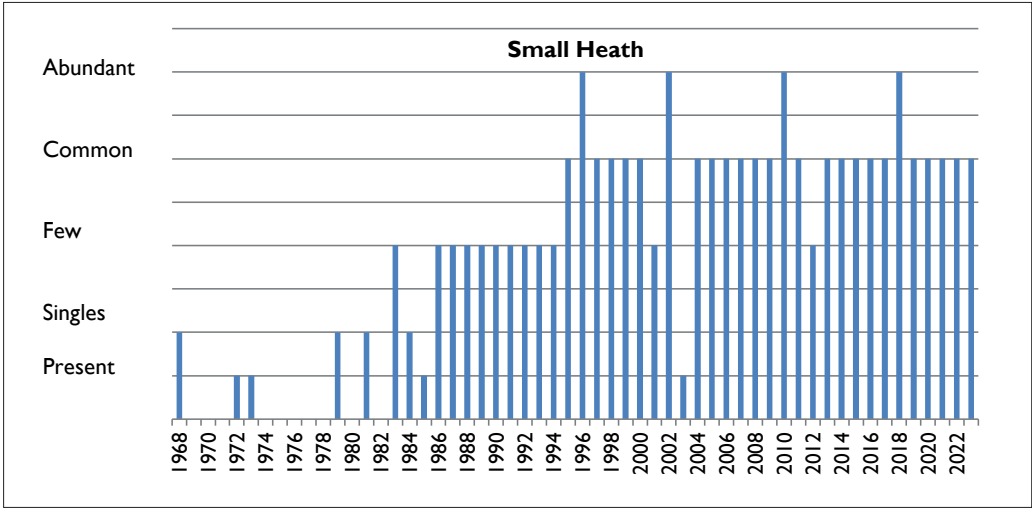


Figure 8: Small Heath, abundance/year.

under wing. The species is bivoltine and can be seen on the wing from mid-May to mid-July and again in August and September. On Lundy it has been recorded from April to October when it is occasionally extremely numerous. Peak sightings typically give counts in three figures.

Adults feed on a wide variety of plants but the larvae depend on species of grass, in particular Sheep's fescue *Festuca ovina* of which there is an ample supply on Lundy.

Ringlet: *Aphantopus hyperantus*

Although a “brown” butterfly, the wings in some lights are almost black. It is easily distinguished by the series of yellow-ringed black dots with white centres on the underside of both pairs of wings. It is a recent addition to the Lundy butterfly list. It was not recorded in Chanter, Loyd or Palmer and first appeared in the LFS Annual Report of 1968 since when it has been recorded in most years up to the present day. The Ringlet is univoltine being on the wing only from mid-June to mid-September. On Lundy it has been recorded in June, July and August and in peak years it has been counted in double figures, up to about 50 individuals. It is thus one of the commoner butterflies on Lundy.



Plate 11: Ringlet, photographed on Lundy
© Alan Rowland.

Adult butterflies feed on Brambles *Rubus spp.* and composites, whereas the larvae depend on a variety of coarse grasses, for example Cock's-foot *Dactylis glomerata* and Common Couch *Elymus repens*, of which there is no shortage on Lundy.

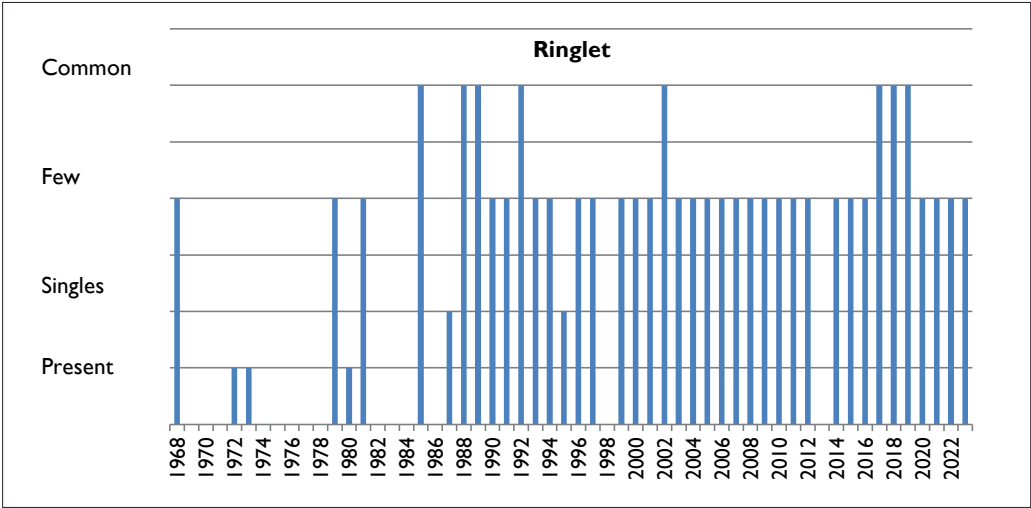


Figure 9: Ringlet, abundance/year.

Meadow Brown: *Maniola jurtina* (formerly Large Meadow Brown *Epinephele janira*).

This is our most common “brown” butterfly with very little to distinguish it. It does have a single eye-spot, black with a central white dot but otherwise quite plain. When at rest even this eye spot can be covered. This species, then known as the Large Meadow Brown, featured in the first Lundy butterfly listing in Chanter (1877) and has been recorded most years ever since. It is the most common butterfly on Lundy. It is a univoltine species, present for most of the summer and into autumn. On Lundy it has been reported on the wing from April with the last seen in early October. Numbers can rise to over a thousand individuals although they are usually in the hundreds.

The adults feed mainly on various species of Thistle whereas the larvae are less selective and can exist on a wide variety of grasses, but with a preference for Cock’s-foot and False Brome.

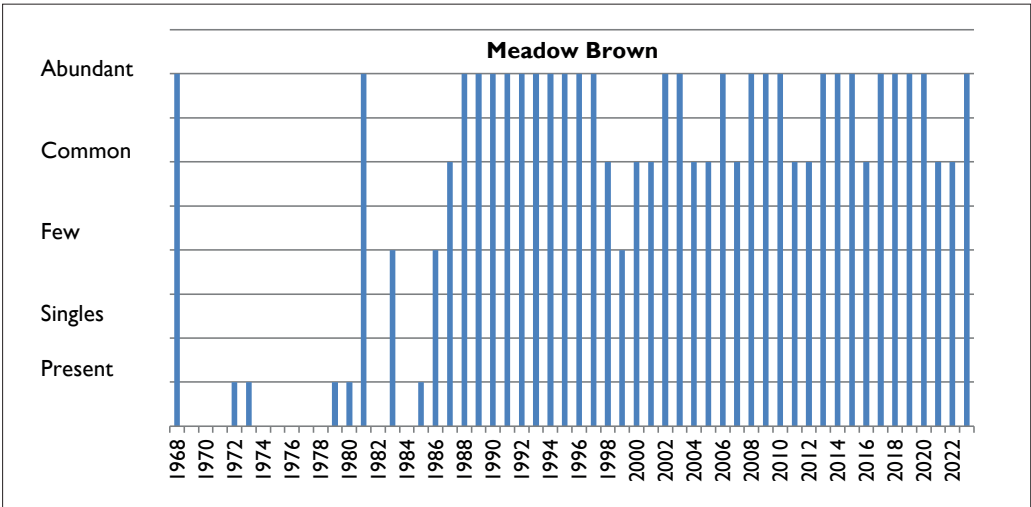


Figure 10: Meadow Brown, abundance/year.



Plate 12: Meadow Brown, photographed on Lundy © Alan Rowland.

Gatekeeper: *Pyronia tithonus*

This brown butterfly can most easily be confused with the duller Meadow Brown. However, where close inspection is possible, it is distinguishable by having two small white spots inside the dark circle on the underside of the hindwings. These underwings are much more bright orange compared to a Meadow Brown. It is univoltine and adults are only on the wing in July and August. On Lundy it has been reported in the months between June and October although the possibility of confusion with Meadow Brown brings

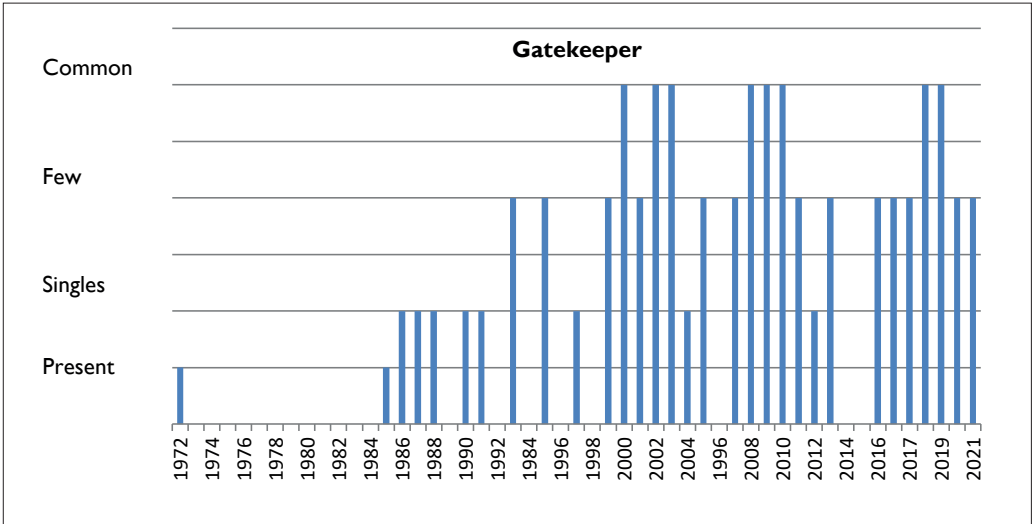


Figure 11: Gatekeeper, abundance/year.

the sightings in the outlying months into question. In season, it is one of the most common butterflies to be seen on Lundy. It was first recorded by Chanter (1877) under its previous name of Small Meadow Brown *Epinephele tithonus*.

Habitat preference is for hedgerows and scrubby woodland; its alternative name is Hedge Brown. The adult butterfly feeds on Brambles *Rubus* spp., Common Fleabane *Pulicaria dysenterica* and Ragworts *Jacobaea* sp. whereas the larvae rely on Bents *Agrostis* spp, Fescues *Festuca* spp. and Meadow grasses *Poa* spp.-all of which grow in abundance on Lundy.



Plate I 3: Gatekeeper, photographed on Lundy © Alan Rowland.

Grayling: *Hipparchia semele*

Grayling is listed under UKBAP as a priority species and as Vulnerable on the GB Red List. It is a cryptic species of butterfly which settles almost invariably with its wings closed. On Lundy its grey, white and brown patterning when seen on granite can make it almost invisible. It flies fast and in a fluttering manner and, when in flight, broad yellow bands can be discerned by the keen-eyed. It is univoltine, with adults on the wing in the months of July and August and occasionally September. It was first listed in Chase (1894) under its earlier name of *Satyrus semele*, who stated is as “common” on Lundy, but was not subsequently listed by either Loyd or Chanter. It has been reported as early as May through to September on the island. There have been as many as 58 recorded in some years, in others just single sightings. Numbers are highly volatile, depending on the

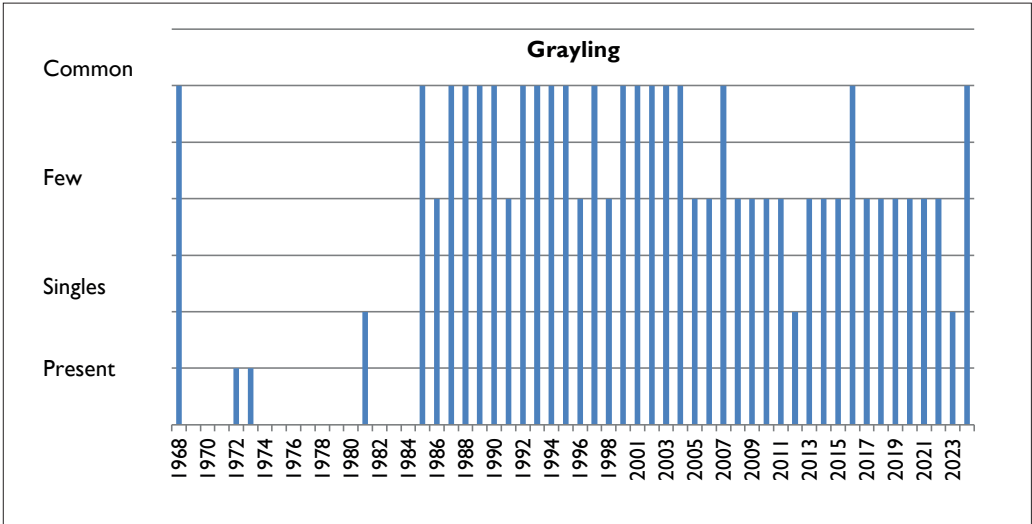


Figure 12: Grayling, abundance/year.

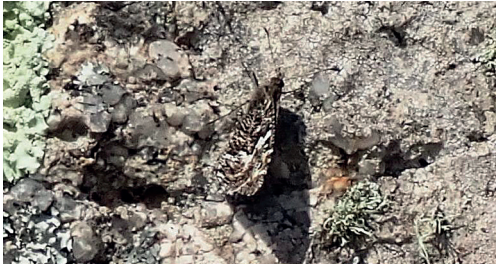


Plate 14: Grayling, photographed on Lundy
© Alan Rowland.

identification skills of the observer, but are generally declining.

Adult butterflies have catholic tastes feeding on flowers of many heathland plants, whereas the larvae prefer Bristle Bent *Agrostis curtisii*, Early Hair-grass *Aira praecox*, Fescues *Festuca* spp., Marram Grass *Ammophila arenaria* and Tufted Hair-grass *Deschampsia caespitosa* almost all of which grow on Lundy.

Dark Green Fritillary: *Argynnis aglaja*

Fritillaries are distinctive although separation of species is more of a challenge, with all having golden upper wings with chocolate brown markings. This species is similar in size and shape to the much commoner (on the mainland) Silver-washed Fritillary but is found in a different habitat. Silver-washed are a woodland species whereas Dark Green prefers the more open areas of flower-rich meadows, sand dunes and both chalk-rich and limestone grassland. It was not listed on Lundy in the historic literature. The first report was in 1980 since when only three more sightings have been made (1994, 2002 and 2003), all between May and July. On the mainland it can be found on the wing generally in July and August. Having not been reported for 20 years, and with neither a full description nor photograph, these records cannot be verified and must remain doubtful and unconfirmed.

Adults prefer plants with purple and mauve flowers, but the larvae depend on various species of Violet *Viola* spp.

White Admiral: *Limenitis camilla*

A White Admiral was recorded on 11th October 2008 by an unknown recorder with location on the island not given. This species is known to inhabit the tree canopy and occurs in Southern and South-eastern England. It is highly localised and rare with a flight period of July to early August and mid-September. No sightings are listed in the historical literature and the 2008 record is therefore highly doubtful and cannot be confirmed.



Plate 15: Red Admiral, photographed on Lundy © Alan Rowland.

Red Admiral: *Vanessa atalanta*

One of, if not, the most easily recognised butterfly in the UK. It is the only black, white and red British butterfly and the fact that most people can and do recognise it is evidenced by the number of years in which it has been recorded on Lundy since 1877. More than one individual is always seen, the lowest count being three. It is a migratory species and most of the British records are of migrants with only a few adults successfully

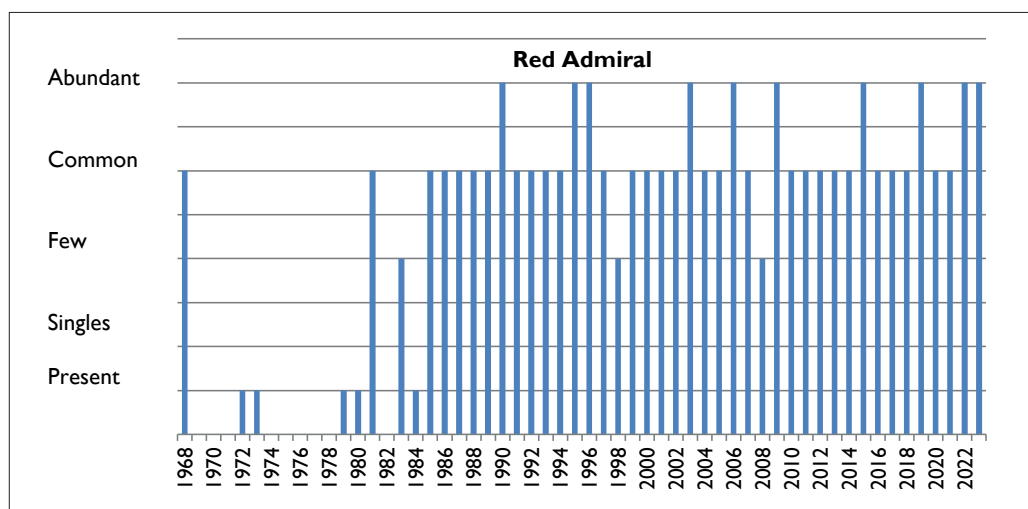


Figure 13: Red Admiral, abundance/year.

hibernating each year. It can reliably be seen between February and November on the mainland and on Lundy has been reported from February through to December, with the lack of January sightings perhaps due to shut-down and sparsity of visitors.

The larval food plant is Common Nettle *Urtica dioica* (and occasionally Small Nettle *U. urens* and Pellitory of the Wall *Parietaria judaica*) but the adults are very catholic in their diet and can be found almost everywhere.

Painted Lady: *Vanessa cardui*

This is a migratory species which in some years is absent in the UK whilst in others there is a huge influx when it is super-abundant. It is unmistakable, one of our largest butterflies with distinctive orange, black and white upper wings surfaces. Its breeding is staggered during its migration from Africa but once here may continue to breed when adults can be seen on the wing from April to November and indeed has been reported on Lundy in all of those months. In peak years numbers recorded can exceed 1000 individuals. The first Lundy record is in Wollaston (1845) when it was listed under its previous name of *Sylvia cardui*.

Adults prefer wide open areas and generally shun woodlands and will feed on almost anything, but the larvae depend on Thistles *Cirsium* spp.



Plate 16: Painted Lady, photographed on Lundy © Alan Rowland.

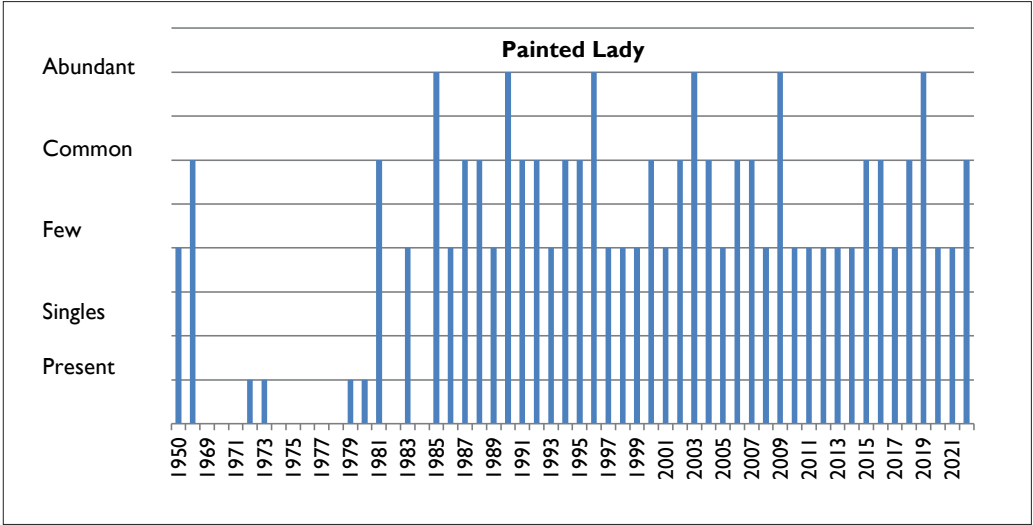


Figure 14: Painted Lady abundance/year.

Peacock: *Aglais io*

When at rest with wings open this butterfly is unmistakable with its pair of multi-coloured “eyes” on a rich burgundy background. It can be found almost anywhere and at any time. It does hibernate, but during any unseasonably warm weather will wake it so that it can be seen on the wing in all months of the year, true also for Lundy apart from January when visitors/



Plate 17: Peacock, photographed in North Cornwall © Alan Rowland.

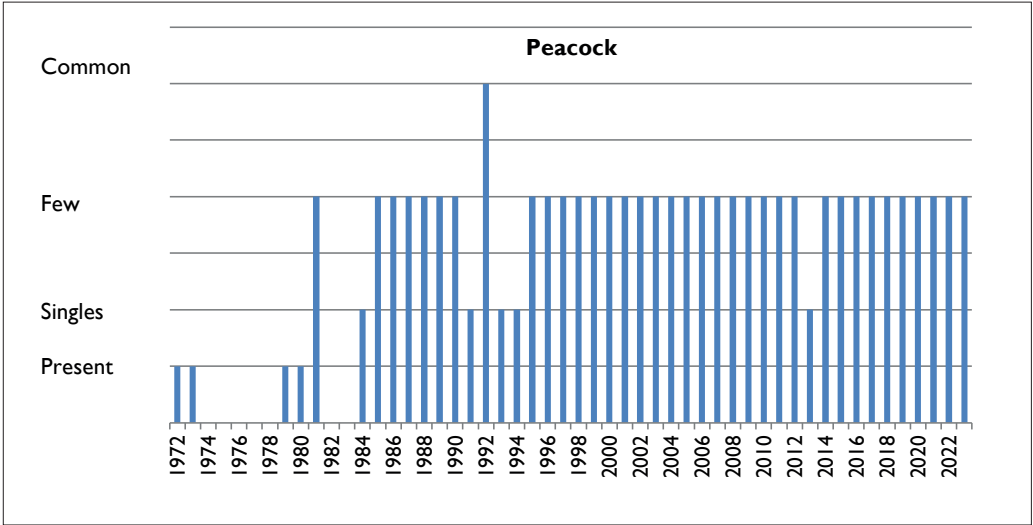


Figure 15: Peacock abundance/year.

recorders are few. It is generally in ones and twos with a high of 10 in 1992. It has been recorded in almost every year since Chanter (1877) noted it on Lundy under its earlier name of *Vanessa Io*.

Adults can be found on Buddleias, Hemp agrimony *Eupatorium cannabinum*, Teasels *Dispacus spp.* and a wide variety of other plants where they congregate in numbers. Larvae prefer Common Nettle *Urtica dioica* and Small Nettle *U. urens* and Hop *Humulus lupulus*. With the exception of Hop all are these plants are common on Lundy.

Small Tortoiseshell: *Aglais urticae*

This is an easily identifiable butterfly with striking patterns of alternate yellow and black barring and bright blue lower wing edging. It is easily confused with the Large Tortoiseshell, but this species went extinct in the 1960s and apart from a few individuals prospecting in the South East of the country has not yet made its way to the far west. It hibernates over winter with adults emerging in spring. It can be seen on the wing in all months of the year if awakened by warm weather during hibernation. Like the Peacock and Red Admiral, it has been recorded on Lundy from February to November. The earliest sighting was by Chanter in 1877, as *Vanessa urticae*. Numbers on Lundy fluctuate between 10s of individuals to 70 in 2003, 100 in 1987 and a high of 500 in 1991.

Adults feed on a wide variety of plants whereas larvae depend specifically on Common and Small Nettle.



Plate 18: Small Tortoiseshell, photographed on Lundy© Mandy Dee.

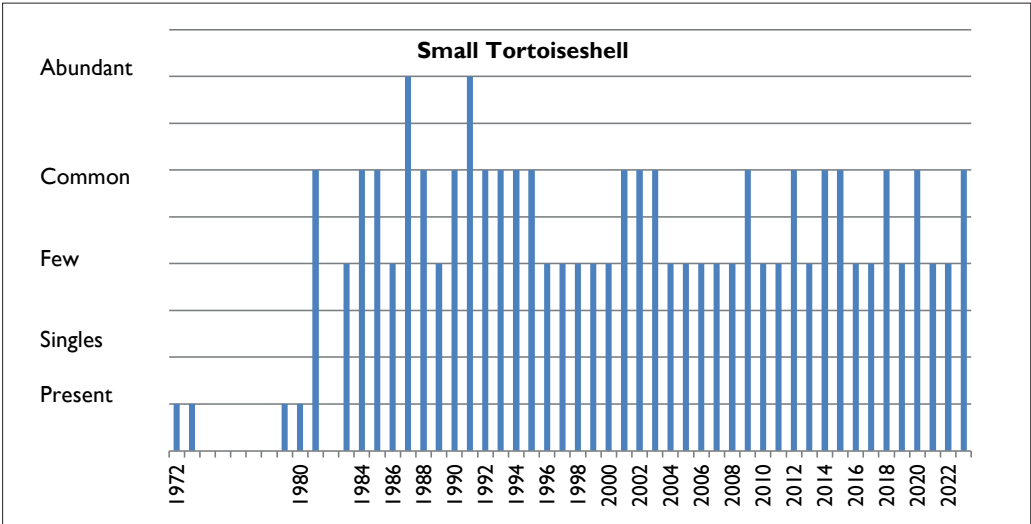


Figure 16: Small Tortoiseshell, abundance/year.



Plate 19: Comma, photographed on Lundy
© Alan Rowland.

Comma: *Polygonia c-album*

This is the only British butterfly with a ragged edge to its wing in its natural state. With folded wings it can look like a dead leaf with only the white “comma” mark to give it away. The upper wings have a rich golden-brown hue. On the mainland this is a common species which is expanding its range. Not so on Lundy. Sightings are few and far between. Most are of single butterflies, with two exceptions in 2021 and 2023 when two were found each year. Under its earlier name of *Vanessa c. album* it was recorded by Chanter (1877). Palmer (1926) noted it as “uncommon” on Lundy. It is bivoltine with adults emerging from hibernation to breed in early spring when it can be the first butterfly to be recorded. Breeding takes place again by these individuals in July and later breeding in September can result in the adults

hibernating. Thus, individuals can be recorded in every month of the year, but on Lundy they have only been recorded in April, July, August, September and October.

It is generally a woodland species which feeds on a wide variety of plants. The larvae prefer Currants, *Ribes* sp. Elms *Ulmus* sp., Hops, Common Nettle and Willow *Salix* sp, the latter two being the only food plants to be found on Lundy.

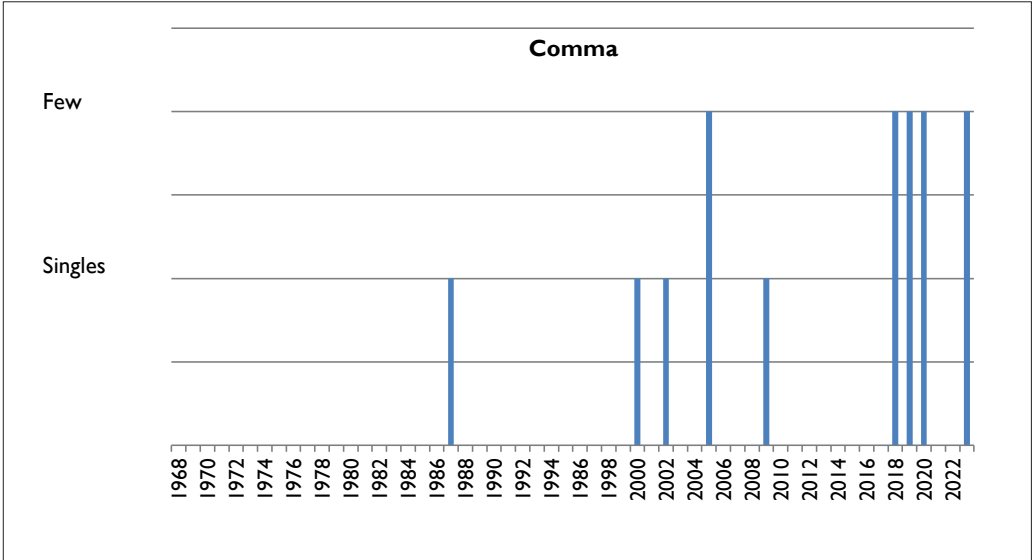


Figure 17: Comma, abundance/year.

Monarch: *Danaus plexipus* (also known as the Milkweed Butterfly)

This is an unmistakable butterfly. It is the largest that might be seen in the UK and with wings conspicuously coloured orange above and almost white below enclosed by dark line markings. It is not native to the British Isles but is a rare migrant to the rest of UK and Lundy. That it is unmistakable is evidenced by the description given by someone unfamiliar with butterflies in his entry in the School Bungalow Logbook on Tuesday August 14th 1951 (Harrison), quoted below: -

Fine Northerly wind + rather cool. Saw big butterfly on way to Hotel for Breakfast Showed 4 inches across was blowing up the valley from Bill Fisher's Bungalow looked white on top but when nearer was blown by Southerly wind over wall + then saw a beautiful yellow underneath. Had some dark markings but was unable to detail the markings. Duly reported to Warden David Lee. (Harrison 1951).

This record never made it into the LFS annual report, and the logbooks have not survived. However, Monarchs are known to reach the UK when there are strong westerly winds during their annual migration from Canada to Mexico although there are populations in the Iberian Peninsula and Canary Islands. It was first reported in 1876 in South Wales and the latest irruption into the UK was 2023 when numbers were recorded in the south of England but not on Lundy. Its food plant Milkweed, *Asclepias* spp., is not native to the British Isles so there is no possibility of breeding.

This recently discovered record by Harrison is the first known record of a Lundy sighting, but it has since been reported on 25th September and 2nd October 1982, 9th October 1996 and 11th August 1986 when single specimens were seen.



Plate 20: Monarch, photographed in North America © J.J.Cotten.

LYCAENIDAE: Hairstreaks, Coppers and Blues

Brown Argus: *Aricia agestis*

The earliest sighting is in Chanter in 1877. More recently, one was seen on 27th July 1989 by Tony Parsons. There is no dispute about this sighting as Tony provided a photograph. Although widespread in south-eastern England occasional sightings are made further west, as is indeed the case here. The Brown Argus could easily be confused with the brown form of a female Common Blue, but the photograph taken by Tony Parsons shows the distinctive orange

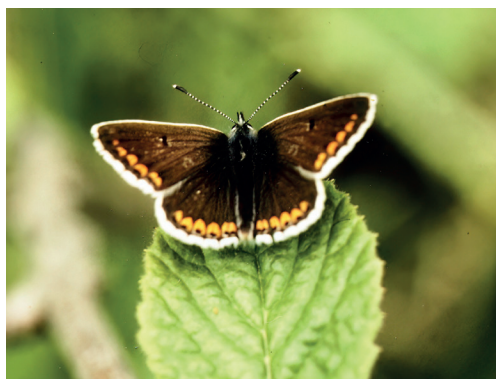


Plate 21: Brown Argus, photographed on Lundy (27.07.1989) © Anthony J.Parsons.

markings on the upper wings. A bivoltine species, the adults have two flight periods late April to late June and late July to mid-September.

The adults' primary food plant, Common Rock-rose *Helianthemum nummularium* does not occur on the island but they will feed on a variety of plants including buttercups, Thyme and Clovers. Its larvae's food plants; Common Stork's-bill *Erodium cicutarium* and Dove's-foot Cranesbill *Geranium molle* do. Breeding and further sightings on the island have not been recorded.



Plate 22: Common Blue, photographed on Lundy © Alan Rowland.

Common Blue: *Polyommatus icarus*

The upper wings show a brilliant blue with a distinctive white edge whilst the under wings bear orange marks. The earliest sighting on Lundy was in 1925 in Loyd's list. Early records were of single sightings but since the 1980s there have been sightings of up to five and in the bumper year of 1987, 22 were recorded. This species featured in Chanter's, Loyd's and Palmer's lists. Usually a bivoltine but occasionally trivoltine species, the flight periods are May/June and again July to September and occasionally into October. Lundy sightings have been as early as April, although these could have

been misidentified Holly Blue, and up until September.

Adults use a wide variety of food plants, but the larvae depend on Common Bird's-foot Trefoil *Lotus corniculatus* usually in association with one of two ant species – Southern Wood Ant *Formica rufa* and a Red ant *Myrmica sabuleti*. The plants are extremely common on Lundy although neither of the ant species nor larvae have yet been recorded.

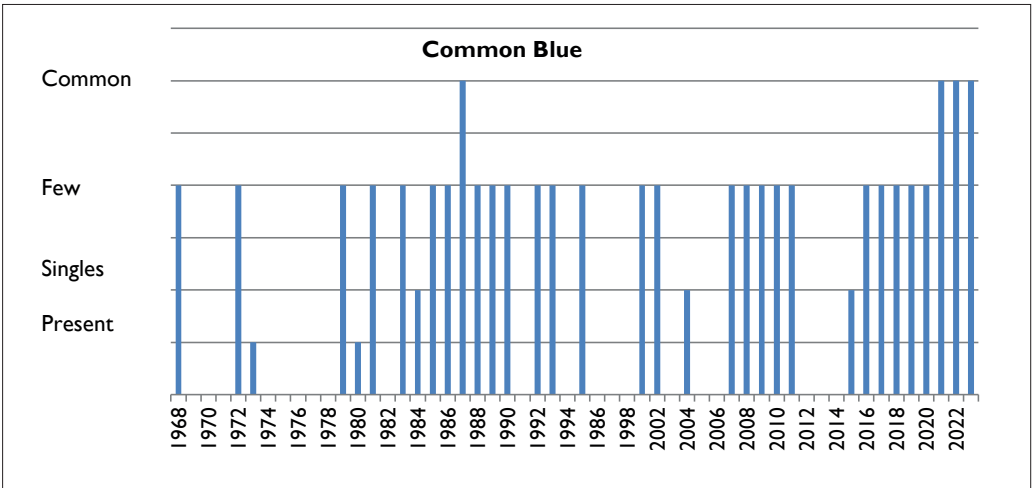


Figure 18: Common Blue, abundance/year.

Green Hairstreak: *Caliphrys rubi*

A surprisingly small butterfly, but as the only green species that can be seen in the UK it is unmistakable. It is not listed in Chanter, Loyd or Palmer so may be a more recent colonist. It has been seen on Lundy on four occasions only: in 1983, 1988, 2002 and in 2007 when on each occasion two specimens were recorded. The 1988 sighting was by Tony Parsons who photographed it and it is not in doubt. Three of the sightings were in June with the 2007 sighting being at the end of May. Its flight period is mid-May to late June.

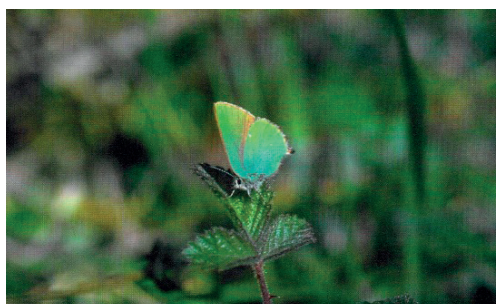


Plate 23: Green Hairstreak, photographed on Lundy © Anthony J. Parsons.

The adult butterfly's food plants are Hawkweeds *Hieracium* spp, and Hawthorn *Crataegus monogyna* whilst the larvae depend upon Common Bird's Foot Trefoil, Gorse *Ulex* spp., and Broom *Cytisus scoparius* all of which are common on Lundy. This is the widest range of food plants of all the UK butterflies.

Holly Blue: *Celastrina argiolus*

The first recorded sightings of the Holly Blue were made by Dymond in 1972. No sightings were listed in Chanter, Loyd or Palmer. It is not very common on Lundy with mainly single sightings each year with occasionally as many as eight individuals. However, in 1992 and 2007 20 and ten individual sightings respectively were recorded. The time and location of sightings is a good clue to identification. The distinctive under wing of pale blue separates it from all other small blue butterflies. It has two flight periods of

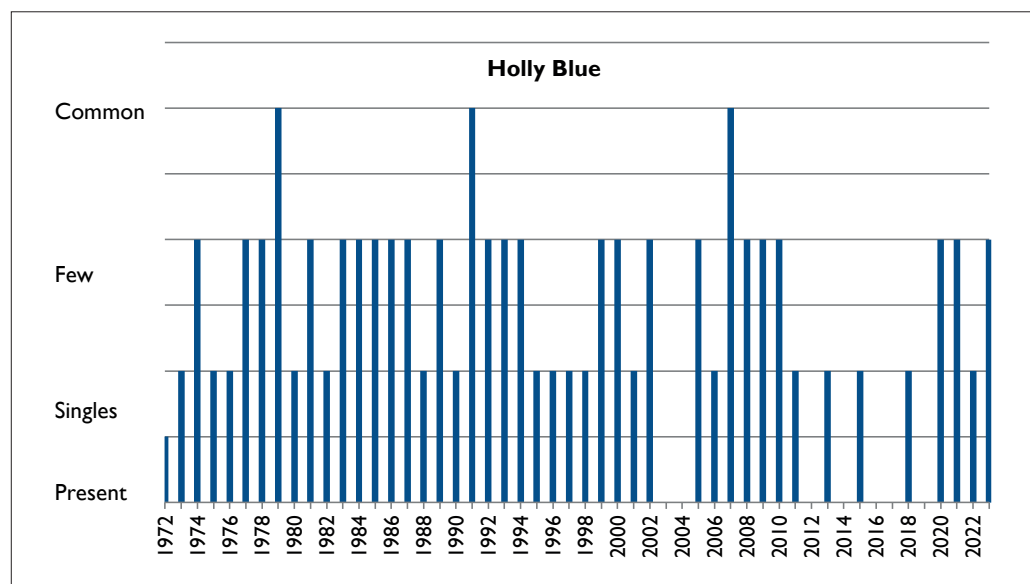


Figure 19: Holly Blue abundance/year.

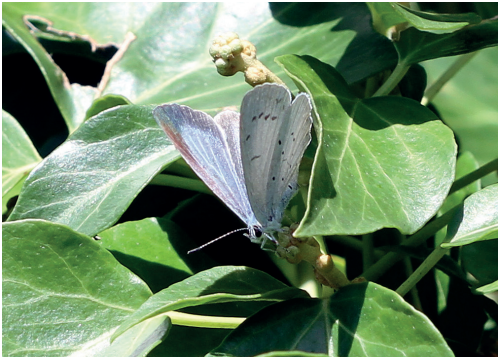


Plate 24: Holly Blue, photographed in North Cornwall © Alan Rowland.



Plate 25: Small Copper, photographed on Lundy © Alan Rowland.

late March to late May and mid-July to the end of November. On Lundy it has been recorded from as early as March to July and again from July to October.

It is a common resident throughout England and Wales and the larvae feed on Holly *Ilex aquifolium* buds and flowers early in the year and Ivy buds and flowers at the end of the year. The adult butterfly prefers Hawkweeds and Hawthorn and can often be seen on the latter. These feeding habits will help with identification.

Small Copper: *Lycaena phlaeas*

This is a distinctive small (26-40mm) butterfly with glowing bright copper wings. It was first recorded in 1877 by Chanter and has been common ever since. It can be seen in all seasons of the year except for winter, being multivoltine with up to four generations in a good year. On Lundy it has been recorded from April to October.

Larvae feed on Common Sorrel *Rumex acetosa* or Sheep's Sorrel *R. acetosella* whilst the adults have more catholic tastes and can be found feeding on yellow composites (*Asteraceae* spp.).

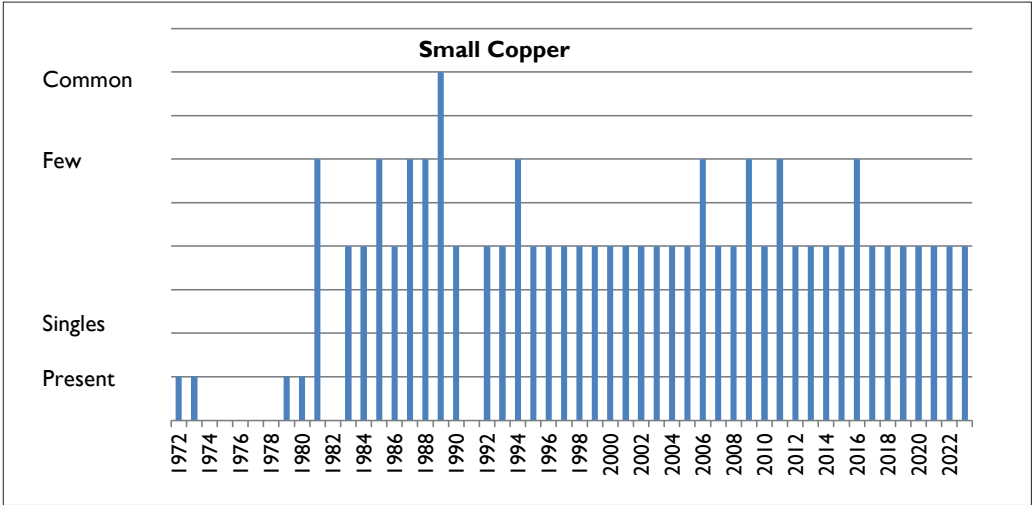


Figure 20: Small Copper abundance/year.

CONCLUSIONS

There have been losses of species which mirror the general decline in Butterfly species on the British mainland. There are no specialised local habitat species on Lundy. Nevertheless, the number of species remains constant, in the low twenties. With more regular transect surveys the numbers can be monitored and contribute to the UKBMS database. I recommend those interested in butterflies to volunteer to walk the transect during their visit and submit their records directly to the Warden.

ACKNOWLEDGEMENTS

This paper would not have been possible without the consistent and generous logging of butterflies seen on Lundy by the many lepidopterists and other visitors that visit the island. My thanks go to everyone who has entered their sightings in the LFS logbook and to those hard-working individuals who collate and report those results in the LFS Annual Reports.

Thank you everyone and do please continue to seek out and record butterflies. It is my hope that this account will ensure that if you see a rare or never recorded on Lundy butterfly in the future you will enter a description, or better yet, a photograph.

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