

Assessing Agricultural Change on the Isle of Wight. Final Report

A report on the findings of analysis of Farm Census, Agriculturally related Planning Consents, Countryside and Environmental Stewardship and Agricultural Traffic

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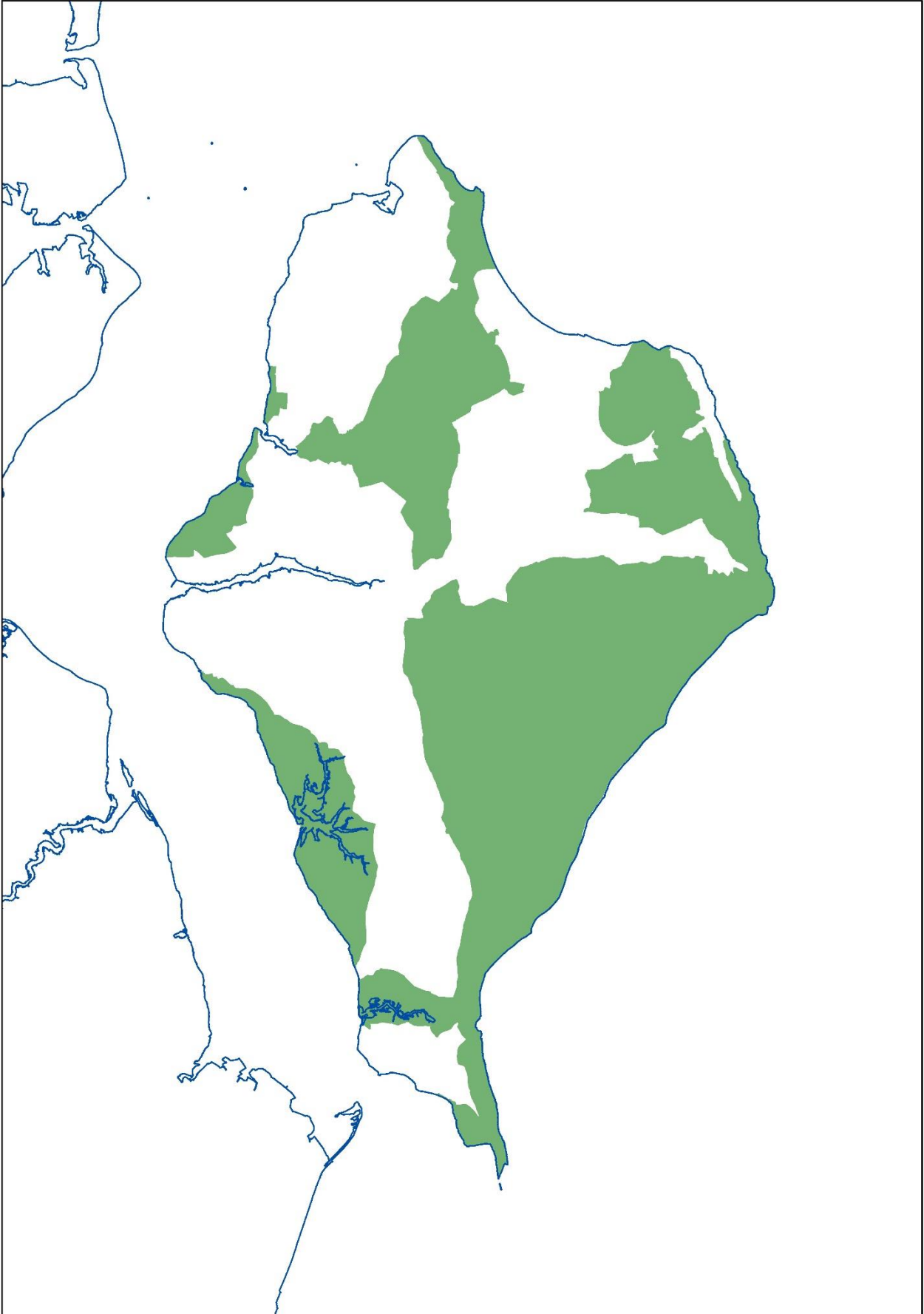


Figure 1 Isle of Wight showing designated Isle of Wight Area of Outstanding Natural Beauty (shaded green)

Executive Summary

This report provides the details of research to assess agricultural change on the Isle of Wight between 2005 and 2015. Analysis of Isle of Wight data from the Defra annual census/survey of agriculture and horticulture; Natural England Countryside and Environmental Stewardship uptake; Isle of Wight Council planning data for agriculturally related planning consents and Department of Transport traffic survey data was used to highlight a number of key findings. These were then discussed with stakeholder representatives.

Much of the agricultural change indicated in the annual Defra survey/census has been at relatively small scale in terms of types of crops grown or category of labour force jobs. But some trends are particularly marked such as the dramatic contraction of the dairy sector in terms of farms (but less so in terms of dairy herd numbers). This is particularly acute in the AONB which has seen a dramatic decrease in dairy farms and the size of the dairy herd. Cereals remain the largest arable sector although wheat cultivation is falling. There has been an increase in maize cultivation in recent years. Poultry numbers are up with a focus on holdings in the AONB. Horticulture constitutes a small part of agriculture with salad and vegetables grown in the open being the largest type of these crops. Horticulture levels in the AONB are very small. Cattle numbers are down but beef cattle numbers have increased. Permanent grassland and land for grazing livestock is the predominant land use on the Isle of Wight and in the AONB. Horse numbers on commercial holdings have fallen but privately owned horses are the more prevalent and are increasing in numbers. Stakeholder discussions have highlighted further information on these key trends and indicated additional areas of research or discussion that may be useful. In particular in relation to the contracting dairy sector; changes in arable farming due to growth of feed crops for the two large scale anaerobic digester plants and establishment of 10 or so key agricultural hubs which farm the majority of arable land; limitations on continued expansion of the poultry sector; and a continuing increase in private horse ownership. There is concern over the longterm national strategy for farming and the impact of the UK leaving the EU, although this is also seen as a potential opportunity. It is also felt that increased use of technology may bring positive economic and environmental benefits within the sector.

Environmental Stewardship has provided investment in wildlife, natural and historic environment and landscape conservation and enhancement across the Island with a focus on the AONB and chalk downland, pasture, wetland and arable landscapes. Stakeholders believe that stewardship is a very useful way to reward custodianship on farmland which is marginal in terms of agricultural profitability and has delivered clear landscape and natural and historic environmental benefits. They are concerned about the uncertainty caused by the UK leaving the EU but believe that this may create an opportunity for even better targeting with protected landscapes being key to this.

Planning approvals for agricultural development have been largely focused on pasture and arable farmland areas, which is not unexpected as these together constitute around 75% of the farmed area. Planning approvals show a continued demand for agricultural housing alongside a successful argument for the removal for existing occupancy restrictions. Barn conversions for holiday lets remain an important development type with some for residential and a few also changing from holiday let to residential. New agricultural buildings have been consented across the Island with a focus in pastoral areas. Stakeholders raised issues around the lack of acknowledgement of the changes within the agricultural sector when planning applications are considered. They believe that the sector has in effect split into more intensive agriculture on the best and most fertile land being undertaken by around 10 farming hubs with the other smaller farms being more extensive in their operations and focusing on diversification and stewardship to supplement incomes. There was also

discussion around greater rural planning flexibility to allow potential high value business to locate into the area bringing rural regeneration and benefit to existing shops and services.

There is no specific data relating to agricultural vehicles so Department of Transport proxy data was used. Rigid Heavy Goods Vehicle traffic levels have fallen for two axle vehicles (this category includes tractors etc), remained largely static for three axle vehicles (this would include tractors and one axle trailers), and risen for four axle vehicles (this would include tractors and two axle trailers). Observed erosion of the banks of the minor road network cannot be conclusively attributed to agricultural vehicles.

From this information it can be seen that the Island's pastoral landscapes are experiencing the greatest pressure for change but have also seen significant investment and environmental benefits through Countryside and in particular Environmental Stewardship Schemes. The contraction of the dairy sector (in terms of land area and number of farms) and its almost loss in the AONB adds to this pressure. Areas which have experienced a change to their original character (many of which were in pastoral areas) are seeing continued pressure for development away from more traditional agricultural practices.

The end of Environmental Stewardship and the Single Farm Payment with the replacement Basic Payment Scheme and new Countryside Stewardship Scheme is a significant change and it remains to be seen how this will impact on the Island's farming community. Whilst assurances have been given by the government that current investment in the UK's agricultural sector will be honoured until 2020, the recent referendum result and government intention to exit the European Union and negotiate new trade deals with its member states and with other countries around the world creates further uncertainty. It is acknowledged that this uncertainty may include unknown risks but may also include yet unknown opportunities.

It is clear that stakeholder representatives are keen to work with the Isle of Wight AONB and other organisations to better understand and articulate a future vision for the Island's agricultural sector.

Introduction

The Isle of Wight AONB Management Plan 2014-19 includes a number of objectives and policies relating to farming:

Policy P21: Develop initiatives to better understand all forces for change affecting farming in Wight AONB, and its stated priority for delivery

Priorities for delivery: Understand the changing profile of farming on the Island (needs, pressures, opportunities) and the implications of this for AONB objectives.

The John Brownscombe Rural, Environmental and Landscape Consultancy was commissioned by the Isle of Wight AONB Partnership in March 2016 to research and report on agricultural change on the Isle of Wight between 2005 and the present day.

The scope of the research was to be Island wide with sub set information for the AONB designated area where possible (see Map 1). Where datasets are georeferenced it has been analysed by Historic Landscape Characterisation Areas and Landscape Character Types using ArcView GIS software to see if there were particular trends in relation to the landscape.

The datasets

The following data sets were used as the evidence base in the research:

- Defra June Survey of Agricultural and Horticulture data –
 - Island wide data for years 2000, 2005, 2009, 2010 and 2013
 - AONB data for years 2007,2008,2009,2010 and 2013

This non-georeferenced data provides details on the number and size of farm holdings; owned and rented land; agricultural labour force; land use; arable cropping; horticultural crops; and livestock numbers and extent of land used for livestock. Methodologies have changed making some years not directly comparable but the information does provide a useful snapshot of the agricultural sector. Isle of Wight AONB data has only been available as a sub set since 2007.

A lack of a spatial element beyond the Isle of Wight or the AONB does not allow for further spatial analysis by landscape character type or historic landscape characterisation area.

- Countryside Stewardship and Environmental Stewardship Scheme data provided by Natural England
 - Countryside Stewardship Island wide 2004 to 2014
 - Environmental Stewardship Island wide data 2006 to 2016

These data sets provide georeferenced information on the options funded through these two schemes. This includes measures of area, distance or number as appropriate to the grant aid being received.

- Planning application data – Isle of Wight Council (Local Planning Authority)
 - All Island for financial years 2004/05 to 2015/16 filtered to include all agricultural development, agricultural related development (diversification) and change of use of agricultural land.

Data was provided from the Isle of Wight Council's in house 'Accolaid' database on all applications between 2004 (when the system was first used to record planning applications) and

the end of financial year 2015/16. A new set of category codes were used to sort the resulting data with a focus on planning consents.

- Vehicle movement surveys – Department for Transport
 - Survey data on the A road network on the Isle of Wight for years 2000 to 2015 by broad vehicle class.

Whilst there is no specific information for agricultural vehicles within this data there are certain vehicle classes which would include tractors, tractors with trailers and other road using agricultural machinery. A further limitation is that data only relates to the use of the A road network. However, it represents the best proxy indicator in the absence of more detailed specific agricultural vehicle survey data. Such a survey was beyond the scope of this contract.

Historic Landscape Characterisation Areas and Landscape Character Assessment Types

Isle of Wight Historic Landscape Characterisation

The Isle of Wight Historic Landscape Characterisation was completed in 2008. Using the nationally recognised methodology sponsored by English Heritage, the Isle of Wight historic landscape was mapped and categorised based on the historic dimensions of the present-day landscape. Areas displaying similar characteristics were mapped as HLC Areas. For each of these, a series of management aims are defined. The final HLC Areas are shown in Figure 2.

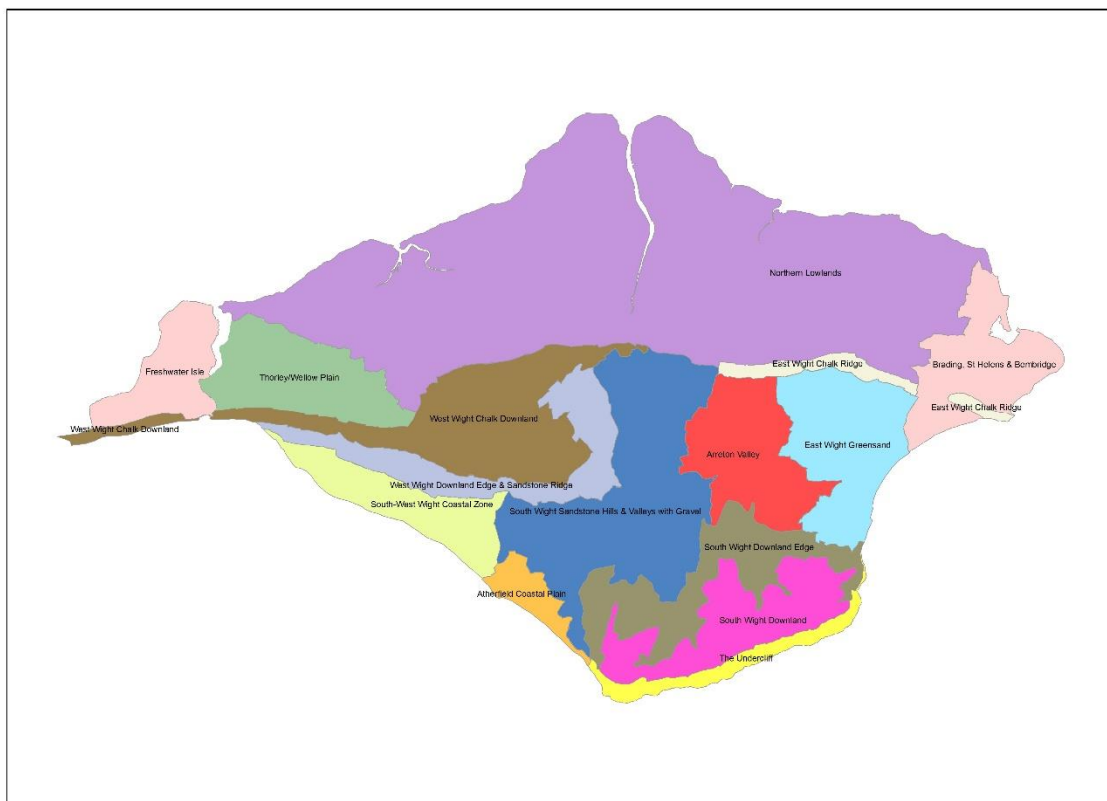


Figure 2 Isle of Wight Historic Landscape Characterisation Areas

Landscape Character Assessment

Landscape Character Assessment is a standardised methodology for identifying, describing, classifying and mapping what is distinctive about landscapes and then creating aims for their future management.

There have been three Landscape Character Assessments for the Isle of Wight.

The Isle of Wight Landscape Character Assessment was completed in 1994. It covered the whole land mass of the Isle of Wight using an early methodology. It identifies eleven Landscape Character Types across the Isle of Wight. (Figure 3)

The West Wight Landscape Character Assessment was completed in 2005 and uses the updated 1999 methodology. It covered the area of the West Wight Landscape Partnership scheme in the west of the Isle of Wight. It identifies a total of eleven Landscape Character Types across the West Wight area. (Figure 4).

The East Wight Landscape Character Assessment was completed in 2015 and uses the updated 1999 methodology. It covers the area of the HLF funded East Wight Landscape Partnership scheme in the east of the Isle of Wight. It identifies a total of eleven Landscape Character Types across the East Wight area (Figure 5).

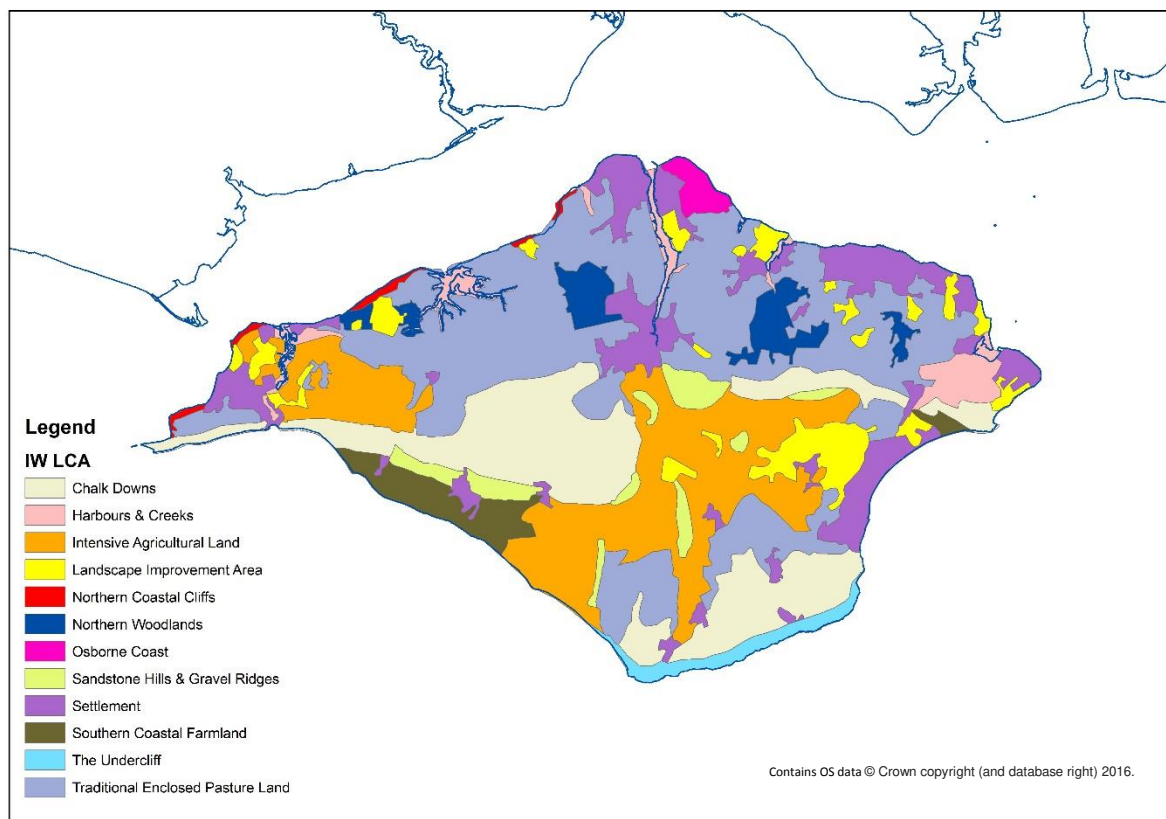


Figure 3 Isle of Wight Landscape Character Assessment 1994

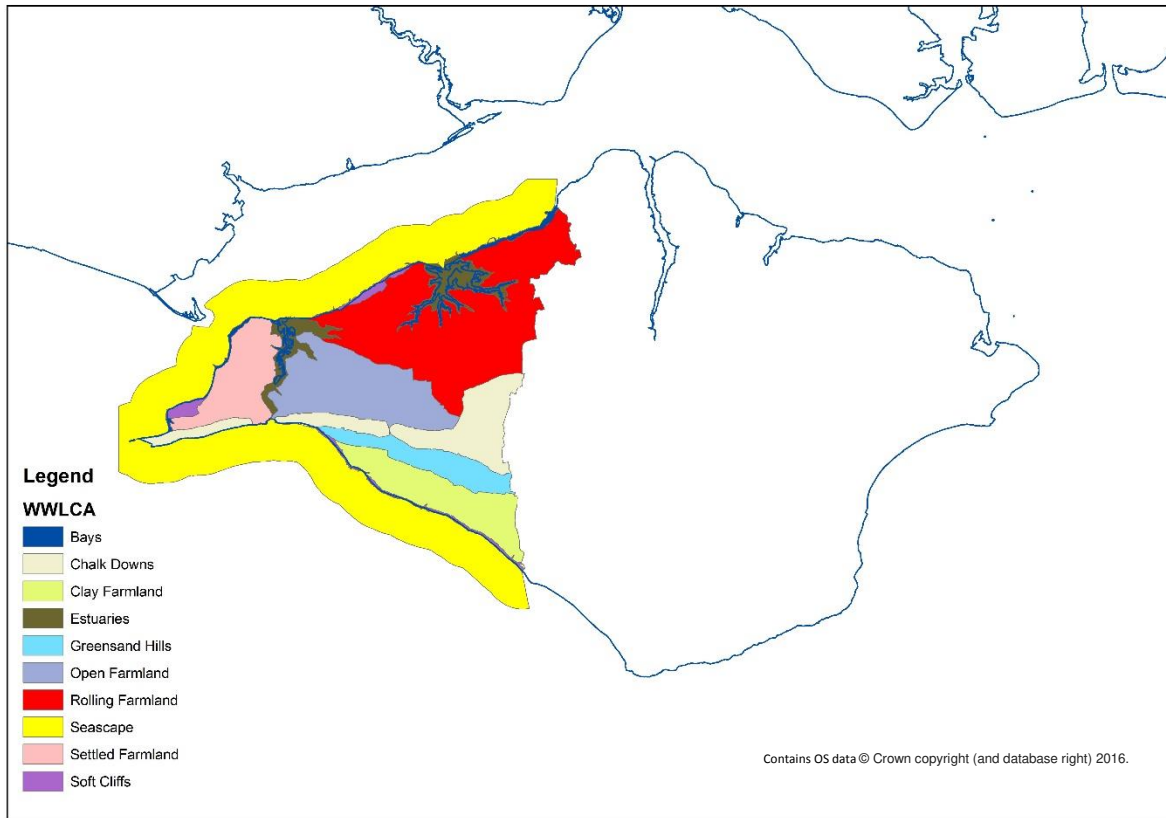


Figure 4 West Wight Landscape Character Assessment 2005

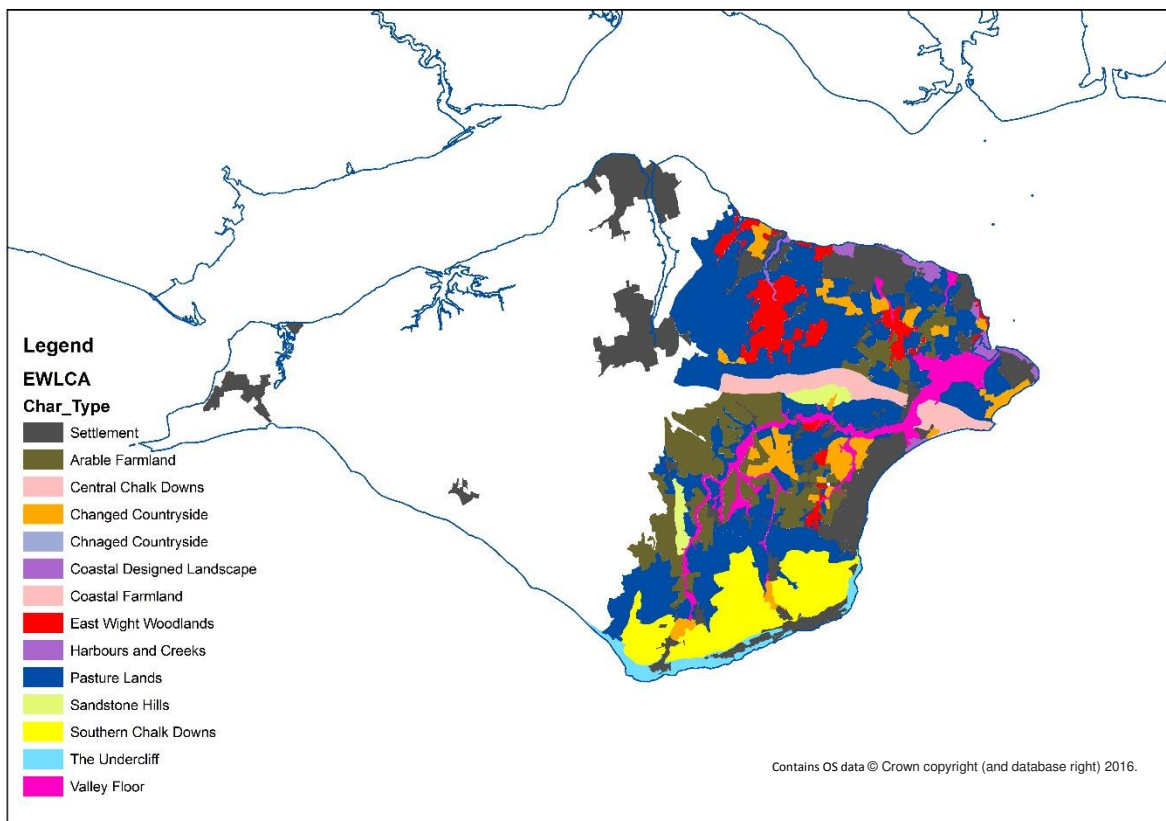


Figure 5 East Wight Landscape Character Assessment 2015

To simplify the consideration of landscape character we have combined similar landscape character types from the three Landscape Character Assessments which is set out in the following table.

Combined Landscape Character Type	IW LCA	WWLCA	EWLCA
Arable Farmland	Intensive Agricultural Lands	Open Farmland	Arable Farmland
Chalk Downs	Chalk Downs	Chalk Downs	Chalk Downs
Changed Countryside	Landscape Improvement Zone		Changed Countryside
Coastal Designed Landscapes	Osborne Coast		Coastal Designed Landscapes
Coastal Farmland	Southern Coastal Farmland	Clay Farmland	Coastal Farmland
Estuaries	Harbours and Creeks	Estuaries	Harbours and Creeks
Pasture Lands	Traditional Enclosed Pasture	Settled Farmland Rolling Farmland	Pasture Lands
Sandstone and Gravel	Sandstone Hills and Gravel Ridges	Greensand Hills	Sandstone Hills
Settlement	Settlement	Urban	Settlement
The Undercliff	The Undercliff		The Undercliff
Valley Floor			Valley Floor
Woodland	Northern Woodland		East Wight Woodlands

To remove any risk of duplication, the Isle of Wight LCA was clipped to only cover the area of the Island which lies outside of the East Wight LCA and West Wight LCA. For this research settlement areas, have been removed where they coincide with the settlement boundaries of the Key Regeneration Areas, Smaller Regeneration Areas and Rural Service Centres as set out in the Local Plan (Island Plan) spatial hierarchy. Settlement outside of the Island Plan hierarchy has been included as it may also include agricultural related development. Each original Landscape Character Assessment includes a list of key characteristics and management aims for each Landscape Character Type.

The extent of each of these Combined Landscape Character Types is shown in a series of figures in Appendix 1.

Stakeholder interviews

An interim report on the findings of the data analysis was shared with the following stakeholders identified by the client:

Land agents: Sam Biles
James Attrill

CLA: Belinda Walters (Isle of Wight Director)

NFU: John Heather
Matthew Legge

BHS: Andrea Durham (IW Chairman)
Tricia Merrifield (IW Byway and Bridleway Officer)

This was then followed up with a face to face meeting to discuss the findings and hear whether they met with the stakeholders' experience of change in the agricultural sector since 2005. This was followed by a conversation about their expectations for the future of the sector in the next 5 and 10 years.

These discussions highlighted some interesting points that had not been identified from the published data and some further considerations and opportunities for the AONB.

Detailed data analysis

Defra June Survey of Agriculture and Horticulture

When analysing this information, which is provided by the Defra, it is important to consider the methodology that has been used to calculate the values shown¹.

A full census is carried out every ten years with the latest being 2000 and 2010. In other years, a sample survey of between 30,000 and 70,000 farms is undertaken (with an average 70% response rate) and the results are then scaled up. Since 2010 this has been predominantly conducted via an online form with the option to request a paper version, prior to 2010 it required the completion of a written postal survey.

For the purposes of this research, data for the Isle of Wight (Unitary Authority) has been used to identify trends in agricultural change. The following years data were compared: 2000, 2005, 2009, 2010 and 2013. A sub-set of data is also available for Areas of Outstanding Natural Beauty and the data for the Isle of Wight AONB dates from 2007, 2008, 2009, 2010 and 2013 has been assessed. This allows some direct comparison for years 2009, 2010 and 2013.

In 2010 the methodology used by Defra changed and this will have an impact on the data shown and on comparison with earlier years. The new methodology introduced a threshold level for holdings based on the criteria shown in the table below which has been extracted from the Defra document.

Table 3: Thresholds for the Defra farm surveys from 2010 onwards

Characteristics		Threshold
Utilised agricultural area	Arable land, kitchen gardens, permanent grassland, permanent crops	>5 ha
Permanent outdoor crops	Fruit, berry, citrus and olive plantations, vineyards and nurseries	>1 ha
Outdoor intensive production	Hops	>0.5 ha
	Tobacco	>0.5 ha
	Cotton	>0.5 ha
	Fresh vegetables, melons and strawberries, which are outdoors or under low (not accessible) protective cover	>0.5 ha
Crops under glass or other (accessible) protective cover	Fresh vegetables, melons and strawberries	>0.1 ha
	Flowers and ornamental plants (excluding nurseries)	>0.1 ha
Bovine animals	All	>10 head
Pigs	All	>50 head
	Breeding sows	>10 head
Sheep	All	>20 head
Goats	All	>20 head
Poultry	All	>1 000 head
Hardy nursery stock		>1 ha
Mushrooms	All mushroom holdings to be included	>0

Holdings with temporarily reduced levels of activity (e.g. seasonally let out land, temporarily empty sheds) are also classed as being above the threshold.

At a national scale, this is thought to have removed around 40% of holdings from the survey due to their being below the new thresholds. This also impacts upon the data shown for the agriculture

¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/182206/defra-stats-foodfarm-landuselivestock-june-junemethodology-20120126.pdf

labour force. The table below from the Defra document shows the estimated impact on all labour force data at a national level.

Table 4: Comparison between results for “all” holdings compared to “commercial” holdings in 2009

	Number of people (thousands)		
	all holdings 2009	commercial 2009	% difference
Total number of people working on commercial agricultural holdings	363	293	-19%
Farmers, partners, directors and spouses	223	165	-26%
Full time	96	85	-11%
Part time	127	80	-37%
Salaried managers	12	10	-12%
Full time	9	8	-10%
Part time	3	3	-16%
Other workers	128	117	-9%
Full time	49	46	-7%
- Male	40	38	-6%
- Female	9	8	-13%
Part time	33	29	-13%
- Male	19	17	-12%
- Female	14	12	-15%
Casual workers	45	42	-7%
- Male	30	28	-7%
- Female	15	14	-6%

It is thought that the change only impacts on around 1% of agricultural production. However, the new methodology does give a greater emphasis to commercial agricultural operations and does allow for better comparison and identification of trend data in the commercial agricultural sector.

Historically the number of holdings saw an increase in 2001 due to the registration requirements following the Foot and Mouth epidemic and then again in 2006 due to the need to acquire a holding number to be eligible for the new Single Farm Payment. In 2010 the survey identified several inactive holdings which were subsequently removed from the results for both 2010 and also retrospectively applied to 2009 figures. This explains the dramatic decrease in the number of holdings shown between 2001 and 2005 and the figures shown for 2009 and 2010.

The assigned farm type is based on the most prevalent activity on the holding. In 2010 the measure of farm type changed from ‘Standard Gross Margin’ to ‘Standard Output’. A Farm Type is now based

on a threshold of 2/3^{rds} of the total 'Standard Output' of the holding falling within the assigned category. More detail on these changes is set out in a published document.²

Appendix 2 provides the full analysis of the Defra June Survey of Agriculture and Horticulture for the Isle of Wight and the Isle of Wight AONB.

The following key findings are taken from the analysis of the data provided by the Defra Agricultural Census / Survey.

Number of commercial holdings: There is a decreasing trend in the number of commercial agricultural holdings on the Isle of Wight and in the AONB. Caution is needed when comparing data prior to 2009 as the methodology changed resulting in the loss of many previously included small holdings which were deemed not to be commercial. In 2013 there were 349 holdings on the Isle of Wight, a 14.8% decrease on 2009 numbers.

Farm size (count): The identified trend is a decreasing number of farms within the smaller farm size categories (<5 hectares, 5<20 hectares categories) and a small increase in the number of very large holdings of >=100 hectares both across the Isle of Wight and within the AONB.

Farmed area: Has remained constant at around 25000 hectares for the Isle of Wight with around 13500 hectares being within the AONB (equating to around 70% of the total AONB area).

Farm Types (count): The number of holdings in each category has fluctuated with a general decreasing trend which matches the overall decrease in the number of holdings on the Isle of Wight. An exception to this is the number of Grazing Livestock holdings which has increased between 2009 and 2013. There has been a particularly large decrease in the number of dairy farms on the Isle of Wight between 2000 and 2013 (34.7% decrease) a continuation of an historic trend.

Farm Types (area): An increasing trend in land used for growing cereal crops (45% of which is within the AONB). Grazing Livestock land is the largest category but has shown a decrease since 2010. There is an increasing trend in land for Mixed Farming and General Cropping in Isle of Wight but a decreasing trend in the AONB. There is a decreasing trend in amount of land used for Dairy Herds and Horticulture.

Rented vs Owned Land: Rented land has fluctuated between 25% and 27% of all agricultural land on the Isle of Wight. The proportion of rented land is slightly higher in the AONB being 35% in 2013.

Land use on Commercial Holdings: Permanent grassland is the largest land use category and has been consistently increasing each survey year. In 2013 it was around 47% of agricultural land use on the Isle of Wight and 50% in the AONB. Rough grazing and temporary grassland areas are decreasing. Farm woodland has shown an increasing trend in the AONB being 7% of the agricultural land use in the AONB in 2013.

Arable Crops: Cereals are the predominant arable crop and wheat is the most widely cultivated cereal crop although the extent of land growing wheat is decreasing. There has been a recent increase in the extent of spring barley cultivation. Maize cultivation has shown a rapid increase in area between 2010 and 2013 (159% increase), this could be due to its use as a feed crop for the biomass plants.

² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/182207/defra-stats-foodfarm-landuselivestock-june-results-typology.pdf

Horticultural Crops: Horticulture is a relatively small part of agricultural activities on the Isle of Wight. The largest sub category being vegetables and salads grown in the open. The bulk of horticultural crops are grown outside of the AONB.

Cattle (Number): Total cattle numbers are decreasing. Isle of Wight Beef Herd (Female beef cows over two years old and their young) have increased since 2009 (remaining largely constant in the AONB). Isle of Wight Dairy Herd (female dairy cows over two years old and their young) have fluctuated with 2013 levels been the lowest in the series of years analysed. However, they have dramatically decreased in the AONB since 2007 with 2013 levels being 44% of those in 2007. In relation to dairy on the Isle of Wight, this would seem to indicate an intensification of dairy with a slightly contracting herd on significantly fewer dairy holdings. In the AONB it would seem to reflect a change away from dairy farming with a rapidly decreasing herd and a very low number of dairy holdings (the actual number is suppressed as it so small) indicating perhaps less intensive dairy grazing in the designated area.

Poultry (number): Poultry farming is an increasing sector on the Isle of Wight and is largely taking place in the AONB (75.5% takes place in the AONB). The largest category being Laying and Breeding Fowls which saw a sizeable increase in numbers between 2010 and 2013.

Specialist Pigs (number): In recent years, the number of specialist pigs has increased but there was a dramatic decrease between 2000 and 2005 (760% down) with 2013 levels being 83% up on 2005.

Sheep (number): Female breeding flock numbers have fluctuated on the Isle of Wight between 1995 and 2013 and numbers in the AONB have been decreasing since 2008 (in 2013, 81% of the Island total sheep numbers being on holdings in the AONB). The number of lambs under one year old has also fluctuated with a decreasing trend for the Isle of Wight and in the AONB (in 2013, 84% of the Island total lambs being on holdings in the AONB).

Goats (number): Goat numbers on the Isle of Wight are low compared to other livestock. There has been an increasing trend in recent years. 66% of all Goats on commercial holdings in the Isle of Wight are on farms within the AONB.

Horses (numbers): Horse numbers are only captured on farms with a holding number (it is not a necessity to have a holding number to keep horses). There has been a decreasing trend since 2009 with 17.5% fewer horses in 2013 than in 2009. This decrease was particularly marked in the AONB with 40% fewer horses in 2013 than in 2008. This matches the national trend set out in the British Equestrian Trade Association National Survey of 2015, but may not reflect the true situation when private ownership is included.

Labour Force (number): The total number of people working in the agricultural sector on the Isle of Wight has been increasing each survey year since 2000 with nearly 1600 persons in 2013. Numbers in the AONB have been increasing since 2008 after a dramatic drop between 2007 and 2008 of 70%. In 2013 24.2% of all the Isle of Wight agricultural labour force was employed on holdings located in the AONB.

Within this total figure the largest category for the Isle of Wight is Regular Workers full time (although not in the AONB where Farmers/ Partners / Directors and their spouses (both full and part time) are a higher proportion of the workforce). Regular workers part time have been falling in number and proportion across the Island and casual worker numbers have been increasing. Casual workers make up a very small proportion of the labour force in the AONB.

Stakeholder discussions:

The key findings of the analysis of data from the Defra June Survey were discussed with stakeholders. These discussions provided additional information and challenged some of the conclusions that may have been reached by looking at the data alone.

Cattle and Dairy in particular

- No evidence of intensification of dairy – The Defra data shows fewer dairy farms particularly in the AONB with dairy cattle numbers falling but less rapidly. Initially, this was thought to possibly indicate an intensification of dairy production but this is not believed to be the case on the ground.
- Where dairy farms are still operating it is likely that other diversification is used to supplement income from milk (holiday lets, farm shops, secondary processing of dairy products to add value).
- Many dairy farms may also still be breeding dairy cows for sale rather than to have as milking herd. The lack of presence of bovine tuberculosis on the Isle of Wight has created a demand for Island cattle in other parts of the country that are affected.
- All advice (NFU, CLA etc.) is not to invest in dairy but to spread risk across other activities.
- Many remaining dairy farmers are doing it because of passion and family tradition and not profit.
- There are concerns that the critical mass re infrastructure is close to being reached. Any further loss of dairy herd will have knock on consequences for viability of specialist infrastructure on the Isle of Wight. This will also have consequences for Island cattle farming as a whole.
- Milk price increases will help industry. There were conflicting views on whether there is an EU over supply or under supply impacting on the market price. Local markets have been established but at small scale and largely related to farm shops. Other initiatives have been tried but have had little longevity. Transport of milk off of the Isle of Wight is thought to add 2p per litre to cost and has a resultant impact on profit margins. Milk prices are currently around 20p a litre but dropped to 12p a litre at one point in 2016.
- There was an interesting discussion around the lack of a cooperative approach within Dairy sector in comparison to others (IW Grain Group). This is thought to be due to lack of confidence that the significant investment that would be required would bring a return. The only way forward would be an 'angel' investor not wishing to necessarily make a return or public sector backing which is increasingly unlikely.

Poultry

- The increase in numbers of poultry is from a comparatively low starting point when compared to this sector on the mainland.
- The Defra data tells us that this is largely based in the AONB.
- There has been a national expansion in this sector which is a farming success story as it has had little if any subsidy and is profitable.

- Isle of Wight Poultry farming is less intensive than the industry on the mainland and there is a lack of 'industrial' processing locally which will limit its growth. It is likely that poultry farming on the Island will not directly compete with the mainland as this would require significant investment in infrastructure for processing and still have the issue of transport costs for off Island sales .

Arable

- Wheat remains the main focus of arable farming but is decreasing in the extent of land used for its cultivation.
- Maize and Spring Barley cultivation both increasing in extent. Spring Barley may be due to environmental stewardship options.
- Maize is used as a feed crop for the two Anaerobic Digester Plants. Between 25% and 30% of arable land is now used to provide feed crops for the Anaerobic Digester Plants. There are usually between three and four cuts of feed crops per annum. There is capacity for the AD plants to increase their production and for more small scale farm based AD units. Market prices for grain will have an impact on use of land for growing AD feed crops. There are parts of the Island's landscape not easily accessed by machinery that are unlikely be used for AD crop production. Italian Rye is also being grown as a feed crop.
- Some concern was voiced regarding the lack of availability of straw and to some degree hay and hayledge due to AD feed crop cultivation and decrease in wheat cultivation. This may have an impact on cattle farmers and also on those keeping horses (although straw alternatives are available).

Horses

- Defra numbers are not reflective of true situation as they only capture horses on commercial agricultural holdings. Horse ownership on the Isle of Wight is largely by private individuals and the Defra figures do not capture these.
- There has been a centralised passport system within the horse community but this has been operated by a number of commercial providers and not fully subscribed so figures from this may also be unreliable. The best informed estimate of horse numbers on the Isle of Wight is around 2500 (Defra data states 776 in 2013 and a decreasing trend). Locally it is thought that the number of horses in on an increasing trend.
- It is thought that the number of horses are under recorded as horse owners are inclined to try and stay off the Radar due to worries about planning and business rate implications.
- Anecdotally, there was no impact on horse numbers on the Isle of Wight as a result of the recent recession. Horse owners will sacrifice other expenditure for their horses. Although there have been some concerns over welfare issues these have been minimal (most widely published was in relation to the stables at Osborne) and the BHS run campaigns on this.
- Predominant focus for horse ownership is in traditionally pastoral areas. However, horse owners are prepared to travel across the Island to access available paddocks. Prices for these have increased significantly. Areas on urban fringe are now under pressure for other development so more rural locations are being sought which also have better direct connection to the off road bridleway and byway network. Land prices also being inflated by increased use of marginal areas for arable – this could be due to increased arable prices and

AD feed crop cultivation. Lack of available land can lead to over grazing and a lack of paddock rotation leading to soil erosion and invasion by rank weeds.

Conclusions

It can be seen above that there have been a number of significant changes to the agricultural sector on the Isle of Wight in the last ten years or so.

In terms of future trends

Cattle and Dairy

At best there will be a stabilising of this sector and in particular dairy farming but there may be further contraction. If this occurs it may have implications for cattle farming as a whole as there be a lack of critical mass to retain infrastructure locally (specialist vets etc). A major driver for dairy will be the market price for milk. Impacts and opportunities of Brexit are not certain.

Poultry

It is likely that the recent growth in this sector will either level out or continue to grow at a slower pace. The confirmed cases of Avian Flu in the UK in late 2016 and early 2017 have resulted in the imposition of restrictions which if kept in place for a prolonged period may have an impact on welfare and possibly profitability.

Arable

The use of arable land for growing of Maize and other feed crops for the Anaerobic Digester Plants will continue. It will be impacted by any increase in market price for arable crops but there will always be crops grown at a sufficient level to allow both plants to continue to operate as they are owned by a consortium of arable land owners. There are currently national discussions regarding concerns over the implications on soil management and biodiversity as a result of increased levels of cultivation of maize. There may be some regulations or guidance published in the near future to help to deal with this. However, there are other potential feed crops that can be used.

Horses

Horse numbers are likely to increase as this has been the recent trend even during the recession. Availability of paddocks is becoming an issue and may be further exacerbated if more horses are kept. There is a desire to keep horses close to the bridleway and byway network due to road safety concerns, this may result in more paddocks being established in more rural locations as people are prepared to travel further to access areas to keep their horses. There is also pressure to try and make horse keeping areas 'self-sufficient' by providing all the facilities that may be needed on the one site (such as sand schools). The horse keeping community are likely to be wary of authority due to concerns about planning and other regulations. This may make it difficult to work with them on initiatives on landscape management and horse keeping, the British Horse Society will be a useful partner in taking this forward.

Other matters

Technology has the potential to see the better use of chemicals and fertilisers which will benefit business profitability and the environment.

The Brexit vote has increased uncertainty, certain Government guarantees are in place up to 2020 but then there is great uncertainty regarding market access, new market opportunities, tariffs,

exchange rates, and future subsidy. There is a general belief that environmental protections will remain in place but with possible modifications.

There is a need for a joint approach to lobbying Government for a longerterm approach to agricultural strategy to allow better individual business planning.

Countryside Stewardship and Environmental Stewardship

The Environmental and Countryside Stewardship Schemes have provided funding to farmers for environmental management activities on their holdings.

The Countryside Stewardship Scheme was set up by the Countryside Commission in 1991 and taken over by the Ministry of Agriculture Fisheries and Food (MAFF) in 1996. In 2000 the scheme became part of the England Rural Development Programme. This scheme closed to new applications in 2004 just prior to the commencement of the replacement Environmental Stewardship Scheme. Schemes funded through Countryside Stewardship expired in 2014.

Environmental Stewardship commenced in 2005 and was run by the Department for Environment Food and Rural Affairs (Defra). It consisted of two levels: Entry Level Stewardship (including Organic Entry Level Stewardship for Organic Farms) and Higher Level Stewardship. Anyone who owned a farm or manages agricultural land could apply for funding through the Entry Level Stewardship which was not competitive provided the options chosen totalled at least 30 points per hectare of land. ELS schemes last for five years. Higher Level Stewardship was a more targeted scheme and not all land was able to benefit. HLS was designed to provide support for more active and environmentally beneficial management practices. HLS also includes grants for capital works (not part of ELS). It was run as part of the Rural Development Programme for England under the European Agricultural Fund for Rural Development which is part of the Common Agricultural Policy. The Environmental Stewardship Scheme closed in 2014 (with some schemes running to 2016) to be replaced by the new Countryside Stewardship Scheme which commenced in 2016.

Both schemes have used European funding to promote agri-environmental approaches.

For this research, we have considered data from the original Countryside Stewardship Scheme between 2004 and 2014 and the Environmental Stewardship Scheme between 2005 and 2014.

The Isle of Wight is thought to have had one of the higher uptakes of Environmental Stewardship. Comparison between the Defra Farm Survey data which gives a total figure for farmed area and the Environment Farm Environment Record data gives us the following information:

Isle of Wight:

- Total Farmed Area in 2013 24,903 hectares (taken from Defra Farm Survey)
- Total Entry Level Stewardship area 12,341 hectares (taken from total area recorded in Farm Environment Records being 112 holdings)
- Equating to 49.56% of farmed land in Environmental Stewardship
- 65 holdings were also in the Higher Level Stewardship Scheme (taken from the number of Farm Environment Plans)

AONB:

- Total Farmed Area in 2013 13,567 hectares (taken from Defra Farm Survey)
- Total Entry Level Stewardship area 8,634 hectares (taken from area recorded in Farm Environment Records being 81 holdings)
- Equating to 63.6% of farmed land in Environmental Stewardship
- 51 holdings were also in the Higher Level Stewardship Scheme (taken from the number of Farm Environment Plans)

Full graphs and analysis for options from the Countryside Stewardship Scheme are shown in Appendix 3 and graphs and analysis for options from the Environmental Stewardship Scheme are shown in Appendix 4. These include analysis for the Isle of Wight, Isle of Wight AONB (Wight AONB), and by Historic Landscape Characterisation Area and Combined Landscape Character Type.

The following sets out the key findings from this analysis.

Hedgerows and Ditches: Under Countryside Stewardship there were 150 metres of ditch maintained/restored and 109 metres of hedgerow planted (all of which was in the AONB). All this activity took place in pasture land.

In the Environmental Stewardship Scheme, there was much more investment in the hedgerow and ditch management with 169.6 kilometres of hedgerows managed on one side (56% in the AONB) and 102.3 kilometres of hedgerow managed on both sides (64% in the AONB). Ditch management was also much more extensive with 46.3 kilometres of full ditches managed (53% in the AONB). These were mostly located in pasture land, in sandstone and gravel areas, in arable areas and on the valley floor.

Trees and Woodland: There was little investment in trees and woodland under the Countryside Stewardship Scheme.

In the Environmental Stewardship Scheme, there was 364.8 hectares of woodland managed (56% in AONB) and 8.29 hectares of new woodland created (93% in AONB). 24 hectares of woodland pasture and parkland maintained (83% in AONB) and 12.77 hectares of wood pasture created (63% in AONB). All of this was predominantly located in pasture lands and chalk downland areas.

Traditional buildings and archaeology: There were no funds for this category through Countryside Stewardship.

In the Environmental Stewardship Scheme, 2147 sq. metres of traditional buildings were maintained in Entry Level Stewardship (73.4% in the AONB) and 2897 sq. metres through Higher Level Stewardship (66.7% in the AONB). These buildings were located across the Island in areas of arable farmland, pasture and chalk downland. Large areas of land were either taken out of cultivation or had their ploughing depth decreased to protect buried archaeology much of this was in the AONB and on chalk downland, arable farmland and pasture land.

Buffer strips / Headlands / Field Corners:

Countryside Stewardship saw 12.42 kilometres of grass margins (87% in the AONB) the clear majority in coastal farmland and pasture lands (focussed on the Brading and Yaverland area).

Under the Environmental Stewardship the 6 metre buffer strips were the largest category under this heading with 56.24 hectares in the Entry Level Scheme (60.6% in the AONB) and 34.56 hectares in Higher Level (51.7% in the AONB). These were largely located in areas of pasture land and arable farmland with some in chalk downland. Field corner and headland management falls within this category and is largely located in pasture land, arable farmland and chalk downland areas.

Watercourse buffers: Mainly focused in pasture areas, arable farmland and unsurprisingly valley floor areas. Although small in extent with 0.76 hectares of 6 metre buffers on intensive grassland close to watercourses in ELS (26.3% in AONB) and 1.55 hectares of 12 metre buffer strips on cultivated land in HLS (none of this was in the AONB).

Wildbird Seed Mix / Skylark Plots / Fallow areas for birds:

Countryside Stewardship saw 6.55 hectares of wildbird seed mix (30.5% in the AONB)

Under Environmental Stewardship, most of these options were within Higher Level Stewardship and located in pasture and arable farmland areas. Wild bird seed mixture was used on 24.3 hectares (73% in AONB) and fallow plots for ground nesting birds 48.18 hectares (31.4% in the AONB).

Pollen/Nectar Mixture:

Countryside Stewardship saw 4.93 hectares of pollen/nectar mix (40.5% in the AONB).

Under Environmental Stewardship, nectar flower mixture was used on 22.72 hectares (46% in AONB) and there was 10.59 hectares (84.8% in AONB) of pollen and nectar flower mix.

Stubble/Set-Aside: Countryside Stewardship had 2 hectares of over wintered stubble followed by spring/summer fallow all of which was in the AONB.

Environmental Stewardship saw 267.74 hectares of overwintered stubble (61.6% in AONB) in the Entry Level Scheme and 176.52 hectares in the Higher Level Scheme (79.3% in AONB). These were located in arable and pasture farmland as well as some on chalk downs.

Pasture and Grasslands:

Countryside Stewardship saw funding for lowland pasture, reintroduction of grassland management 30.26 hectares (85% in AONB), 74.85 hectares of pasture on neutral/acid soils (66% in AONB) and 75.79 hectares of regeneration of grassland and semi-natural vegetation (57% in AONB). The focus for this being chalk downs, pasture lands and valley floor areas.

Environmental Stewardship required farms to provide details of permanent grassland (even when this would not benefit from funding through the scheme) and to ensure that this was retained in extent within a 20% buffer. 4556.25 hectares of such grassland was recorded (83.9% in the AONB). 1005.41 hectares of species rich semi-natural grassland have been restored (96.6% in the AONB) and 565.23 hectares of species rich semi-natural grassland were maintained (96.5% in AONB). The focus for this funding was the chalk downland, pasture land, valley floor and greensand hills areas of the Island.

Scrub Management / Successional Areas:

Countryside Stewardship included measures to manage scrub areas although only just over 1 hectare of land benefitted from this.

Under Environmental Stewardship much larger areas were managed. 32.86 hectares of successional areas and scrub were managed (77% in AONB) and smaller areas were restored or created. These were focussed in pasture areas and chalk downland.

Arable reversion:

In the Environmental Stewardship Scheme, there were options to fund arable reversion either to help to manage soil erosion or run-off or to allow natural regeneration. Much of this was in the AONB and on chalk downland or adjacent greensand arable areas.

Wet Grassland:

Environmental Stewardship saw 219.5 hectares of wet grassland maintained for wintering waders and wildfowl (65.2% in AONB) and 224.26 hectares maintained for breeding waders (10.3% in AONB). These were largely located in valley floor, pasture and arable farmland areas.

Heathland: Environmental Stewardship has seen 22.65 hectares of heathland restored on neglected sites (78.4% in AONB) and 3.51 hectares of restoration of forestry areas to heathland (100% in AONB). These areas are predominantly on greensand hills and pasture lands.

Ponds: Countryside Stewardship saw 1000 sq. metres of ponds restored none of which were in the AONB and all were in pasture areas.

Environmental Stewardship 105 ponds received funding, 67 being less than 100 sq. metres in size (68.6% in AONB) and 38 over 100 sq. metres (44.7% in AONB). These were predominantly in areas of pasture particularly those under 100 sq. metres.

Saltmarsh: Environmental Stewardship has seen 14.94 hectares of saltmarsh maintained (89% in AONB). There were also supplements for grazing or exclusion of grazing on salt marsh and for the creation of inter-tidal and saline habitats. Most of these were within the AONB and mostly within pasture land and estuaries.

Reedbeds / fens: 16 hectares of fen restoration on the Isle of Wight under Countryside Stewardship (87.5% in AONB).

Environmental Stewardship saw 70.56 hectares of fen maintained (56.1% in AONB) and 60.61 hectares of wetland benefitting from grazing supplement (73.8% in AONB). Most were in pasture areas and unsurprisingly in valley floor areas.

Access and Education: Countryside Stewardship funded 19 hectares of open access land and 180 metres of footpath all of which were in the AONB.

Environmental Stewardship 39.98 hectares of open access land were funded (100% in AONB) on chalk downs and greensand hills. 9.91 kilometres of permissive footpath (76.5% in AONB) and 9.05km of permissive cycleway/bridleway (48.6% in AONB) largely in chalk downs, greensand hills, arable farmland and pasture lands. There were 684 educational visits (75% in AONB).

Invasive species:

Environmental Stewardship has provided funding to manage invasive species. 13.73 hectares of bracken were controlled all of which was in the AONB. 2.34 hectares of land received a supplement for control of invasive species (none of which was in the AONB). Bracken control took place in greensand areas and on pasture lands.

Supplements for small fields and difficult sites:

Under Environmental Stewardship 49.4 hectares of land received supplements for working small fields (83.5% in AONB) largely in pasture land and valley floor areas. 207.35 hectares of land receiving supplement for difficult sites (86.7% in AONB) largely on chalk downs and pasture land with some on greensand hills.

Organic management:

Under Environmental Stewardship 868.39 hectares of land under organic management (74.7% in AONB) largely in chalk downland, pasture and arable farmland.

Stakeholder discussions

The key findings of the analysis of data supplied by Natural England in relation to the uptake of Countryside and Environmental Stewardship were discussed with stakeholders.

It was agreed that both Countryside Stewardship and in particular Environmental Stewardship with its non competitive entry level and competitive higher level schemes has brought widespread benefit to the landscape, natural and historic environments of the Isle of Wight.

There was some opinion that funding for small activities on extensively farmed holdings has been beneficial underpinning and rewarding activities which were probably being undertaken anyway but in a more ad hoc manner. And that Environmental Stewardship was particularly useful in more intensively farmed areas to encourage beneficial approaches that may not have been usually undertaken.

Discussion around the future role of stewardship elicited a number of interesting points. Following the result of the EU Referendum, the Government's guarantee to maintain the level of support in relation to farming and stewardship up to 2020 is welcomed. There is concern about uncertainty in the longerterm due to a lack of medium and long term agreed vision for the sector. Anecdotally, the uncertainty has led to a lower level of interest in the new Countryside Stewardship Scheme.

There seems to be a belief that subsidy should be focussed on best quality landscapes and important areas for nature conservation. It was felt that protected landscapes would make an easily recognisable and established target zone along with SSSIs.

The NFU and CLA have been lobbying Government for a longerterm approach to allow and encourage better business planning.

Conclusions

The Countryside Stewardship Scheme saw positive but relatively small scale environmental improvements on a limited number of farm holdings on the Isle of Wight. A large part of the options chosen benefitted pastoral areas in areas designated internationally or nationally for their wildlife and landscape importance (being in Special Protections Areas, Special Areas of Conservation, Ramsar sites, Sites of Special Scientific Interest or the Isle of Wight AONB).

The Environmental Stewardship Scheme saw a much larger investment in environmental initiatives across the whole of the Isle of Wight with the introduction of the non-competitive Entry Level Scheme. The Higher Level Scheme continued to be targeted towards areas of greatest wildlife/landscape value or potential. It is clear that this has brought direct benefit to the Island's landscape, wildlife and their habitats and has also in some cases been of benefit to the historic environment.

There have been particular benefits to the AONB, chalk downland, pastoral landscapes, wetlands and in arable areas.

There is support for the continuation of Stewardship as a mechanism to bring landscape, wildlife and historic environment benefit to the Island and recognition of farmer and landowner custodianship of the countryside.

Designated landscapes, designated nature conservation areas and designated heritage assets should all be used as a focus for future countryside stewardship targeting post Brexit as they are well known and well understood and well established. AONB Partnerships may be very well placed to operate a new approach to stewardship at a more localised but still landscape scale level. The Isle of Wight AONB's inclusion of an Eco-systems Services approach into their Management Plan and its delivery provides additional positive structure to such local targeting.

Planning Data

The Isle of Wight Council as Local Planning Authority has kept a digital database of planning applications since 2004. This data has been analysed to assess change across the Isle of Wight in relation to farming and farmland.

For each planning application details are given of the location (including grid reference); Ward; Parish; a description of the proposal; national statutory code; decision; date of decision; whether decision was taken at committee or delegated to officers; and whether the case went to appeal and the appeal outcome.

A total of 23,761 applications were processed during this period. To simplify data handling, GIS analysis was used and all applications which fell within urban areas (defined as areas within the settlement boundaries of the Key Regeneration Areas, Smaller Regeneration Areas and Rural Service Centres in the Island Plan Core Strategy), were removed.

This initial sift resulted in 8,512 applications within the study area for this research.

Using the national categories, non-agricultural or non-farm related planning applications were removed. For example, applications relating to advertising, and applications for development by householders. The descriptions for the remaining applications were then assessed and those not relating to agriculture, farms or farmland were removed.

A decision was then made to apply a new coding to all the remaining applications to group them within categories which would allow further analysis. The codes used are set out in the following table.

AGHR	Agricultural occupancy restricted housing
AGTMP	Temporary agricultural housing
BCB	Barn conversion for business
BCEQ	Barn conversion for equestrianism
BCH	Barn conversion for holiday let
BCR	Barn conversion for residential
CAMP	Camping / caravanning
CHAG	Loss of agricultural land for another use
EQB	Equestrian development buildings
EQG	Equestrian development general
EQS	Equestrian development sand school
FBCBH	Former barn conversion to barn for holiday let
FBCBR	Former barn conversion to barn for residential
FBCHR	Former barn conversion for holiday let to residential
FEQBR	Former equestrian related barn conversion to barn for residential
FOR	Forestry / Woodland Management
GLA	Glasshouse / Polytunnels
H	Holiday Let
L	Lakes / Water features and associated buildings
MIN	Minerals
MOBEQ	Mobile homes for equestrian related enterprises
MOBH	Mobile homes
MOBHR	Mobile homes for holiday let
MOBR	Mobile homes for residential
NAG	New agricultural buildings

NAGB	New agricultural buildings for business
NAGEQ	New agricultural buildings for equestrian development
NAGH	New agricultural buildings related to holiday lets
OTH	Other
RAGO	Removal of agricultural occupancy restriction
REN	Renewables
SEP	Division or separation of land or holdings
SOL	Solar farms
T	Telecommunications
VEC	New vehicular access associated with agriculture

Removal of refusals left a total of 832 planning approvals relating to agriculture and land use change across the Isle of Wight between 2004 and April 2016. Of these, 282 were within the Isle of Wight AONB. Using the new codes above, these were grouped into categories in an attempt to identify trends. Data was considered for the Isle of Wight as a whole, the Isle of Wight AONB (Wight AONB) and by Historic Landscape Characterisation Areas and Combined Landscape Character Types. Full graphs and analysis of the agricultural, agriculturally related and land use planning application consents are given in Appendix 5.

The following sets out some of the key findings from this analysis.

Agricultural Housing: There were a total of 62 consents relating to Agricultural Housing (19 in the AONB). There is still a demand for new agricultural accommodation across the Isle of Wight (permanent housing 16 (5 in AONB), temporary housing 11 (2 in AONB)). However, this is accompanied by many consents achieved for the removal of an occupancy condition on existing properties (which are required to prove that such accommodation is no longer needed) (32 (11 in AONB)). These changes are widespread but with a focus on the pastoral landscape. Consent for temporary accommodation is also seen in arable areas and areas which have had their original character impacted through other development.

Barn Conversions: Barn conversions make up a significant part of the consented development in the countryside since 2004 (230 consents (87 in the AONB)). They can be a useful way to diversify farming activities to bring in additional income and in many cases, help to secure buildings of historic merit which are no longer useful for modern farming. Conversion for holiday let remains the largest use of former agricultural barns (114 (57 in the AONB)) with conversion for residential use also featuring widely. Whilst this development is spread across the Isle of Wight there is a focus within the pastoral and arable farming areas indicating perhaps a demand for holiday let accommodation in these areas. Change of barns formerly converted for holiday let to residential use has occurred but only in a small number (7 (5 in AONB)).

Equestrian Development: There were 99 consents relating to equestrian development across the Isle of Wight (29 in the AONB). The largest number being for buildings associated with equestrianism such as field shelters, stabling etc. There were 18 consents for sand schools (6 of which were in the AONB). Pastoral landscapes see the greatest number of equestrian related development approvals.

Change of Land Use (including camping/caravanning and farm division/separation): There were 108 consents for this type of development (29 in the AONB). Most relate to change of land from agriculture to either land for housing (beyond defined settlement boundaries) or domestic garden/curtilage or amenity use (74(18 in AONB)). There continues to be pressure for change away

from agricultural use of land to other uses particularly in pastoral areas and areas which have already seen a significant change to their character.

Mobile Homes: There were 20 consents for new mobile homes 10 of which were in the AONB. It is important to remember that in some cases consent for a mobile home may not be required as deemed permitted development (such as use for additional domestic accommodation for a family). Most of these were in pastoral landscapes and areas which have already seen change to their character.

Farm buildings: There were 195 consents for new farm buildings (72 were in the AONB). Consents are for barns and other structures directly connected with agricultural activities with a few being built for associated business activities. Most of these are in pastoral areas.

Horticulture: There were 15 consents associated with horticulture (2 in the AONB). These have been in arable and pastoral landscapes with some in areas already deemed to have had their character changed by similar development.

Holiday Lets: There were 18 consents for stand-alone holiday lets. This has been largely outside the AONB (only 4 consents in the AONB) and in pastoral and arable farmed areas. Along with barn conversions for holiday lets this perhaps demonstrates a continued demand for such accommodation in the countryside.

Lakes / Water features: There were 21 consents for applications relating to lakes for irrigation, similar water features or the amenity use of these for fishing etc. 10 of these were in the AONB. Mostly located in pastoral and arable farmed areas but also in other parts of the landscape. It is perhaps surprising that many of these were in pastoral areas as it would be expected that arable areas would be creating more demand.

Renewables: There were 38 consents for renewable related development. 35 of these were for solar farms (3 in the AONB) and 3 were for other technologies such as biomass and solar panels (1 in the AONB). Once again pastoral and arable farmed areas are the focus for this development largely outside of the AONB. Solar farm development is a recent change and it is likely that the demand for more solar farms will now slow due to changes in feed in tariffs making them less economically attractive.

Telecommunications: There were 9 consents for telecommunications with 5 in the AONB. Whilst not a major change to agricultural land they have been included in the data for completeness.

Stakeholder discussions:

It is felt that 'traditional farming' is now not the norm. Increasingly farmed land is being undertaken by a small number of highly mechanised units with land being let or share farmed as a result.

This needs to be recognised and supported in approaches to consideration of applications. There may be a need to support the 10 or so main hubs of agricultural management who may require larger buildings/equipment (more industrial approach).

Away from these units, remaining farmsteads should be supported to utilise their redundant buildings and have additional rural development which will support the continued farming of marginal land and custodianship of the landscape through stewardship.

There may be scope for more rural development for new industry to support regeneration and to meet market demand for small scale business activity by organisations wishing to locate themselves in village or rural locations. The Island Plan maybe too restrictive currently to allow this and a conversation will be needed to agree a new vision for countryside and rural development.

Focus should be on assessing the balance between 'burden and benefit' allowing inward investment into the AONB and rural areas that brings higher net worth and salaries with a knock on benefit to local shops and services, but also which is of an appropriate scale and design to complement rather than detract from local character.

Turning to the main planning application consents.

New Agricultural Barns

The large number of new agricultural buildings was not a surprise as new build is not Vatable and off the shelf modular designs, are easy to install and suitable for modern farming.

Barn conversions

The holiday let market is believed to now be over supplied. Barn conversions are not cheap to do and when used for holiday let they require a lot of management. There is increasing pressure for change of barn conversions from holiday to business and residential and it is felt that this will continue.

Equestrian Development

Equestrian use of pastoral land likely to continue and increase in extent particularly in marginal areas (difficult to farm areas).

AONB designation

There is still perception in the agricultural community that the AONB designation is a bar to development, although this is getting better. Early discussion with the AONB Unit is being encouraged by stakeholder organisations to over come these false perceptions.

Conclusions:

The analysis has shown that by far the largest category of planning consents related to agriculture is for New Agricultural Buildings, followed by Barn Conversions for Holiday Let, then Equestrian Buildings and Loss of Agricultural Land for another use.

Unsurprisingly, due to arable and pastoral land making up over three quarters of all the land mass the majority of planning consents fall within these areas.

Approvals show a continued demand for new agricultural occupancy housing in the countryside. However, conversely there were more consents for the removal of agricultural occupancy restrictions on existing properties which have provided evidence to show why they are no longer required. Barn conversions for holiday lets, for residential and for business are a significant proportion of the consents during the study period.

Loss of agricultural land for another use is significant and is largely taking place in pastoral areas and areas which have already seen a change to their character (Changed Countryside).

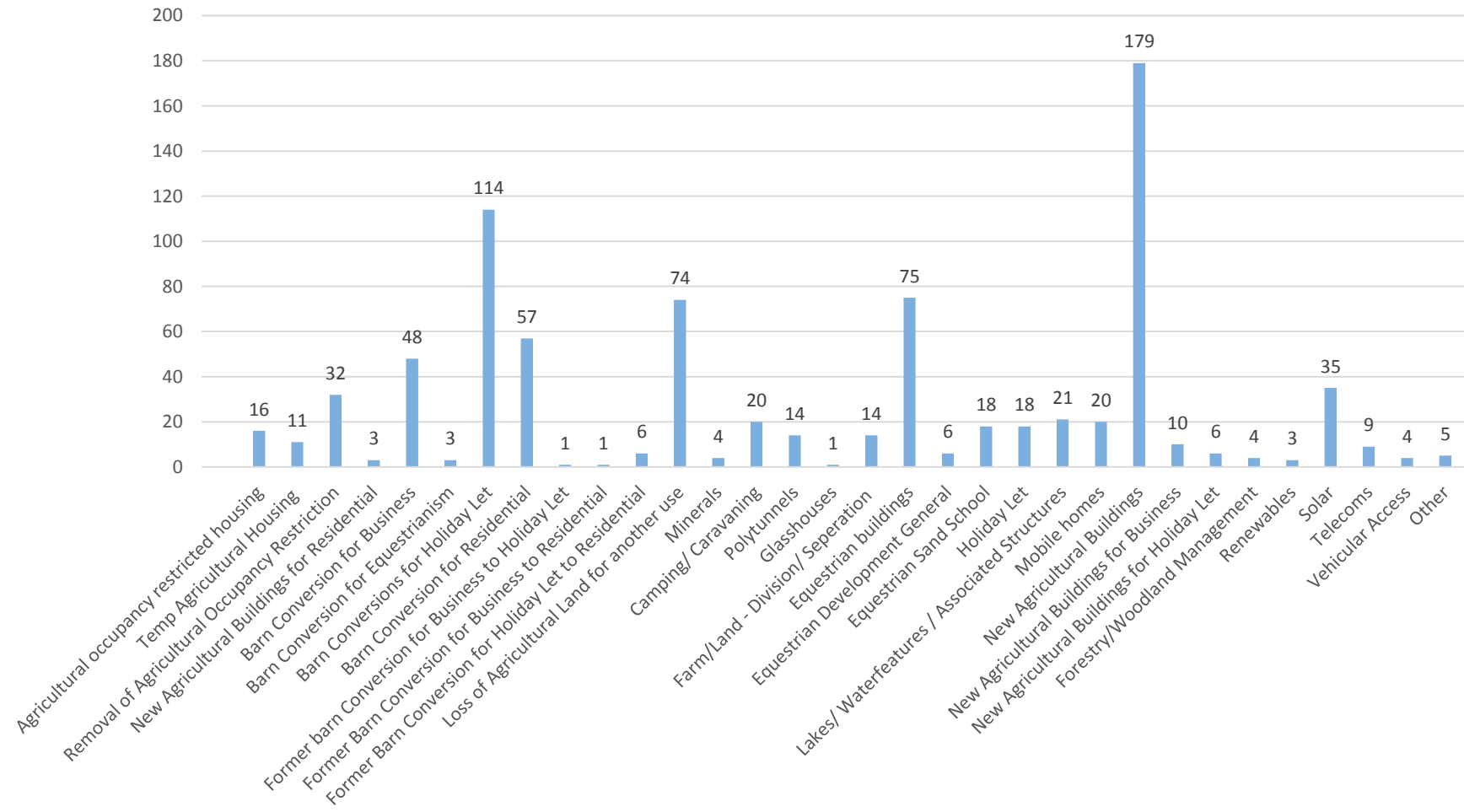
There is thought to be a need to redefine what is meant by 'traditional' agriculture or countryside due to the development of the ten or so highly mechanised farm hubs which are now managing large areas of the most productive land on the Island. Other farmsteads are more likely to be

engaged in lower intensity production and may often be significantly involved in countryside and environmental stewardship and diversification activities.

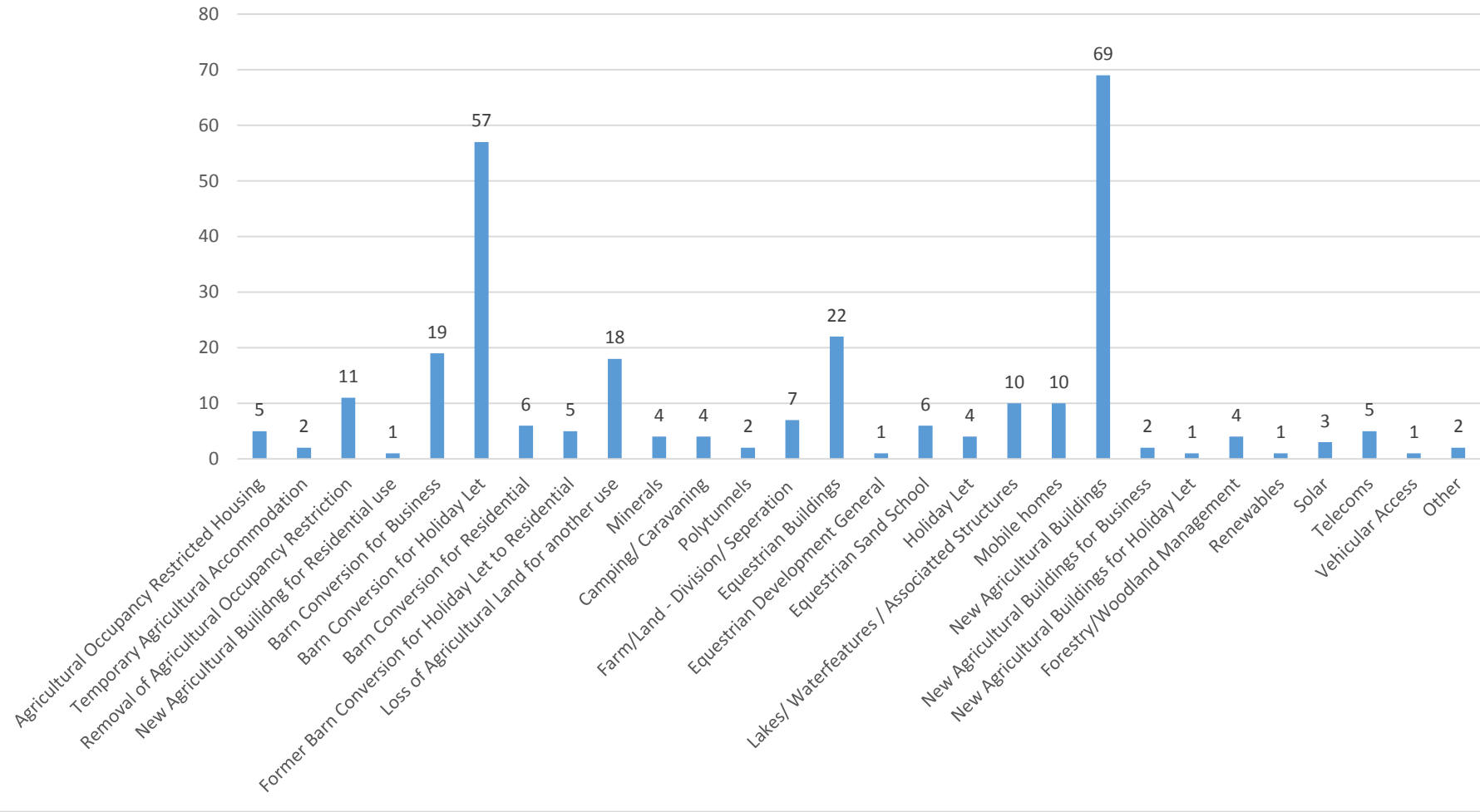
There is a degree of certainty about agriculture in the short term but more uncertainty in the longer term due to the exit by the UK from the EU. This may bring with it challenges but also potential opportunities.

There are opportunities for the AONB to work with stakeholder organisations to work on a new vision for the countryside in relation to agriculture and rural development. It is felt that there may be opportunities to accommodate high value small scale businesses in rural areas (both outside and inside the AONB) without this compromising the integrity of local character. This could also help with rural regeneration and support the retention of existing shops and services in the rural area.

Isle of Wight - Agricultural Planning Applications (approved)



Wight AONB - Agricultural Planning Applications (approved)



Traffic

There is no specific information of agricultural vehicle traffic on the Isle of Wight. However, the Department of Transport do carry out annual surveys on the A road network and these are used to create annual estimates of various vehicle groupings. These can be used as a proxy indicator (in the absence of specific data) in relation to agricultural vehicles.

There are three categories which within which tractors and other agricultural road vehicles and tractors and trailers would fall these are:

- 2 Axle Rigid Heavy Goods Vehicles
- 3 Axle Rigid Heavy Goods Vehicles
- 4 Axle Rigid Heavy Goods Vehicles

Of these the 2 Axle Rigid HGVs is the largest group and this could include road using tractors, combine harvesters etc. The estimated number of vehicles within this category has consistently fallen each year since 2010. The number of vehicles in the 3 Axle Rigid HGV has stayed at around the 1500 a year, this could include road using tractors with single axle trailers. The number of vehicles in the 4 Axle Rigid HGV category has been increasing since 2012 but remains below 770 a year, road using tractors pulling two axle trailers would fall in this category.

The establishment of the two biomass processing plants at Stag Lane, Newport and Gore Basin, Arreton will have created additional agricultural vehicle movements with tractors pulling trailers of biomass feed being brought to site from farms across the Isle of Wight.

In the minor road network, there is evidence of bank erosion caused by vehicles manoeuvring to pass each other in narrow spaces. Anecdotally this is thought to be due in part to use of this network by agricultural vehicles which have increased in size. However, it should be noted that private cars are now significantly wider than forty years ago, (data from 2012 indicates that the most popular cars in the UK are now 16% wider than their equivalent model on sale forty years ago). This is also reflected in the recent increase in accidents in car parks due to the size of parking spaces compared to the size of vehicles (up 35% according to the AA reported on a BBC article Nov 26th 2016).

Full graphs are shown in Appendix 6.

Stakeholder discussions

There is no doubt that tractor and trailer movements have increased since the establishment of the two Anaerobic Digester plants on the Island. But there is less certainty and agreement that this is causing major issues on the road network.

More problematic is the nature of the Island road network which even on the A roads does not have the number of safe passing places or pull ins that are found on the mainland. Also the edge of carriageway maintenance is an issue as it requires cyclists to move into the carriageway and slow down traffic. Stakeholders feel that there is a need for the acceptance of the need to share and more user education on this point.

There is evidence of bank and verge damage particularly on the minor road network, and the incremental change to the profile of banks and road widths as 'bites' are tarmacked and taken into the highway. A good example of this is the minor road between Langridge and Knighton near Newchurch. However, it is not proven that this is all attributable to agricultural traffic as cars have

also increased in width over the last 40 years (16% wider) and with increasing numbers on the roads meeting vehicles on the minor road network is becoming more and more likely.

Traffic levels on the IW are of particular concern to horse-riders who state that the roads are significantly less safe now than ten years ago. They seek to avoid road use which creates pressure for 'self contained' equestrian sites with sand schools etc.

Other matters raised by stakeholders and worthy of mention and consideration:

During the stakeholder discussions we touched on some of the factors on the Island that contribute to the success of the agricultural sector and some of the issues than are limitations or barriers to success. These have been included in the report for completeness.

Stakeholders believe that the lack of consistency of approach by Government and the Ministry is problematic in particular the seemingly rapid turnover of Ministers.

Success Factors

- The Isle of Wight Grain Group is seen as a major success story in regard to having a cooperative approach.
- The Island's climate giving us an advantage with a longer growing season.
- The Island's Bovine Tuberculosis free status creating a market demand for our dairy and beef cattle.
- A general sense of creativity and ingenuity of approach.

Barriers to Success

- Our Island status and severance from the mainland.
- Local infrastructure issues – lack of critical mass to make the required investment at least cost neutral or preferably profitable.
- Certain sectors such as dairy farming are approaching the tipping point for critical mass which if passed will make the current infrastructure supporting that industry more difficult to sustain. In relation to dairy this may also have a knock on impact for all cattle on the Island.
- Not only confined to the Isle of Wight but there are concerns about succession within the farming sector. Farming is decreasingly able to provide an income for a number of generations in a family which often leads to the younger generation training for a different profession and the holding in the hands of the older generation.

Tax relief

There was some discussion about the unintended impact of Agricultural Property Relief creating a potential disincentive for passing on holdings to a younger generation before death and being taken advantage of by those seeking to avoid tax by investing their money from other activities into land ownership, which may be contributing to inflated land values.