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An Assessment of the Recreational Impacts on the European Sites of the River Medina and Ryde Sands on the Isle of Wight with Recommendations for Mitigation



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1 Introduction

- 1.1 Natural Enterprise has been employed by the Isle of Wight Council to recommend measures to reduce recreational pressure on the European designated conservation sites of the Medina Estuary and Ryde Sands, in particular focussing on the impact of disturbance to wintering and passage water birds within the Special Protected Area (SPA) and Ramsar sites (for maps see Figure 1 and Figure 2).
- 1.2 The diversity of habitats and species in the Solent make it an internationally important wildlife resource. The same area has a long history of port-related industry and the associated concentrations of population. Easy access from London, Birmingham and the southern counties has made the area a popular holiday destination and the Solent shorelines and sheltered waters are now enjoyed by many thousands of residents and visitors as a valued recreational resource. There is a delicate balance to be found between the needs of the wildlife and the needs of people. Some of the means by which this balance is maintained are local and national conservation legislation and strategy.
- 1.3 The Isle of Wight Council has obligations under The Conservation of Habitats and Species Regulations 2010¹ (the Habitats Regulations) to achieve favourable conservation status for the designated sites, including Sites of Special Scientific Interest (SSSIs) and Natura 2000 sites (SPAs and SACs). This obligation has become challenging given the effects of increasing development and recreational pressures and the implications of climate change and sea-level rise.
- 1.4 While the Habitats Regulations require that wintering waterbirds are protected within the SPA and Ramsar boundaries it should be remembered that these species may also rely on habitats outside of the protected area itself. These roosting and feeding sites may be covered by local conservation site status but can also can be vital ancillary resources contributing to the favourable conservation status of the European sites.

¹ http://www.legislation.gov.uk/uksi/2010/490/contents/made

- 1.5 There is a body of evidence that recreational disturbance can have a detrimental impact on the well-being of wintering wildfowl and waders. In order to maintain and where possible improve the value of the Ryde and Medina wetlands it is necessary to consider how best to limit the impact of recreational users.
- 1.6 The aim of this report is therefore to recommend selection of measures to mitigate against the disturbance caused to wintering birds by recreational users. The aim is to provide options that are transferable in their approach, that offer a range of cost/investment requirements and that can be used to design short-term projects as well as longer term strategies.
- 1.7 The recommendations propose constructive use of the existing network of Green Infrastructure (GI) in and around the Medina estuary and along Ryde seafront. They attempt to illustrate how GI might be applied as an actively managed tool for the mitigation of recreational impacts on European bird sites. In addition there are suggestions as to how future GI creation, through development, land purchase or other local project work, can be designed to best assist the diversion of recreational pressure from the European bird sites.

2 Methodology

2.1 A combination of desk-based research and on-site structured interview has been employed to investigate recreational use of the European designated sites in the Medina and at Ryde.

Desk-based research

- 2.2 Previous work has been referred to where it relates to:
 - a. Studies of the specific sites
 - b. Relevant Isle of Wight studies
 - c. International research into similar issues.
- 2.3 The findings of this study are summarised in Section 4.
- 2.4 Key categories of recreational activity which are likely to take place in the project study areas are listed in Table 1 below, adapted from the 1996 Solent Forum Report Strategic Guidance for the Solent: Water Based Recreation² published on the Solent Forum website. The focus of this report is recreational impact on wintering birds. It was decided to focus on the most common winter activities with the highest probability of disturbing birds: walking & dog walking, and bait digging.

² Solent Forum (1996) Strategic Guidance for the Solent: Water Based Recreation http://www.solentforum.org/publications/strategic_guidance/SG%20rectour%20final.pdf

Table 1 User Groups

Activity	Significance of the Solent	Comments
Angling	Regional	In 1996 there were an estimated 40,000 active sea anglers in the Solent region.
		The activity takes place in many places around the coast, throughout the year, with seasonal variations according to fish lifecycles.
Bait Digging	Regional	Bait digging takes place in a number of intertidal areas, both by private individuals and professional diggers.
Bird watching	Local /Regional	Sites such as Titchfield Haven, Langstone Harbour, Keyhaven,
and nature study		Chichester Harbour are popular with birdwatchers. There are five local RSPB groups (none on the Isle of Wight).
Canoeing	Regional /National	In 1996 it was estimated that there were c.10,000 canoeists living in Hampshire and the Isle of Wight, and that many more visit.
Cycling and mountain biking	Local /Regional	Cycling along the shore is expected to mainly occur along roads and bridleways. Along the Medina most cycling occurs along the cycle track on the west bank, at Ryde the activity is limited to the Esplanade.
Dinghy Sailing	National /International	In 1996 there were some 60 dinghy sailing clubs within the Solent. The Medina Mariners Association operates from the Folly on the Medina, their timetable includes regular competitions from the Folly. Both the Medina Valley Centre and UKSA operate dinghy training courses.
Horseriding	Local	Limited horse riding is undertaken on Ryde beach.
Kite Surfing	Regional	Ryde beach is used for kite surfing.
Personal Watercraft (Jet skis)	Regional	Jet skis make use of Ryde beach but not as intensively as south coast locations, occasional use is found on the Medina.
Power boating	National /International	Recreational powerboating takes place throughout the Solent, and mainly within the Western and Eastern channels and in Southampton Water. Power boat racing also takes place as a specialist activity and the Solent hosts national and international level competitions.
Rowing	Regional	There are rowing clubs in both Ryde and Newport. The clubs hold a regatta programme.
Scuba Diving	Local/ Regional	Ryde is not a common destination for divers.
Sunbathing Sitting	Local	Passive activities are an important, though often undocumented part of Solent recreation. In good weather large numbers of people enjoy sitting outdoors on beaches and other sites, and people are happy to sit in cars the year round - and in all weathers.
Surfing	Local	Ryde is not a popular beach for surfing.
Swimming	Local /Regional	This is a popular activity from the Region's bathing beaches during the summer.
Walking &	Local	Coastal sites are well used for activity ranging from active

Dog walking		rambling, through to dog walking and short strolls. There are long distance footpaths - the Isle of Wight Coast Path.
Water- skiing	Regional	Water-skiing is focused around a number of areas of water which have been designated for water-skiing in the Region.
Wildfowling		Regional Wildfowling takes place in the Region. Regulated wildfowling is carried out by five wildfowling clubs affiliated to the British Association for Shooting and Conservation.
Windsurfing	Regional /National	There are a number of important sites for Windsurfing in the Region, some of which are of national importance. There are few clubs, but high levels of informal use.
Yachting	National /International	In 1996 it was estimated that there were well over 100 active clubs, at least 100,000 participants and over 25,000 yachts berthed in harbour moorings and marinas. Survey data from 1994 (Solent Forum, 1994) estimates 4500 – 5000 boat nights per annum at each of the large marinas (e.g. Lymington). An active race programme is co-ordinated by the clubs through the Solent Cruising and Racing Association. Cruising is very popular, in particular to harbours in the Western Solent. The Solent regularly hosts yachting events of international importance, such as Cowes Week, and the Whitbread Round the World Race. In 1996 it was estimated that there were at least 500 event days per year, each with between 50-1500 participating yachts.

Semi-structured questionnaire interviews

- 2.5 During December 2011 and January 2012 a total of nine site visits were undertaken.
 Survey days were set to include both weekdays and weekends and timed to include daytime and pre-work recreation.
- 2.6 A semi-structured interview format was employed to ensure each interviewee was asked the same questions in the same order but given opportunities for discussion through open questions and as a final part of each interview. A Sample questionnaire is provided as an appendix to this report.
- 2.7 To understand how interviewees used the site a number of the questions were designed to establish the general pattern of use: frequency, duration, time of day seasonality and route. A draft survey was developed by Natural enterprise and refined following feedback from project stakeholders.
- 2.8 To understand why the site was selected by the user there are questions regarding travel to and from and where the user might go on to next (i.e. are there a number of nearby sites visited in order and which might offer alternatives to one another?). Mode of transport was identified to assess the importance of access and car parking facilities.

- 2.9 To further consider alternative sites and what might divert users to other sites questions ask for any other locations used during the winter (and also when the dog ban is in place at Ryde) and what features were enjoyed at these alternative locations.
- 2.10 To establish a baseline measure of public awareness of the conservation significance of the study sites there is an open question about the birds a visitor may have seen and identified during their visit.
- 2.11 For the Ryde Sands study a question was introduced suggesting the concept of a 'low disturbance zone', that is to say a part of the sands where restrictions on recreational use, unspecified at this time, would apply and asking if this would be a barrier to the user's enjoyment of the beach.
- 2.12 The interviewers were encouraged to extend conversations with the public to adequately cover any areas of individual interest or concern.

3 Site Description

Ryde Sands

- 3.1 The town of Ryde is the largest residential area of the Isle of Wight with a resident population of 30,000 (one fifth of the Island) and an annual visiting population of over 100,000. It is the second largest retail destination, by floorspace and turnover, after Newport.
- 3.2 The Isle of Wight Green Infrastructure Project: Ryde Area Action Plan (AAP) and Green Infrastructure (GI) Report³ give details of the open space character of the project area. The report explains that" Whilst public open space is limited in Ryde, the promenade has always been, and remains, the most significant public open space in the town, both socially and as a place of recreation. Over the years, the Esplanade has been extended through Appley and Puckpool has been developed as a park."



Ryde beach

3.3 Adjacent to Ryde Sands are public open spaces at Appley Park and Puckpool (see Figure 1), the Ryde AAP GI Report highlights the strategic importance of this seafront combination of the two parks along with the interconnecting land presently occupied by the derelict Harcourt Sands holiday park. The report also refers to the potential significance of the Forestry Commission site to the west at Firestone Copse as a

³ The Isle of Wight Green Infrastructure Project Ryde Area Action Plan and Green Infrastructure

recreational 'satellite' area for Ryde residents. There are other, scattered small pockets of open space within the town which are currently not well connected.



Appley Park

3.4 There are two large free car parks adjacent to the beach at Puckpool and Appley.
Parking charges apply throughout the year along the esplanade from 10am until 6pm, and so do not affect early morning users.



Appley carpark

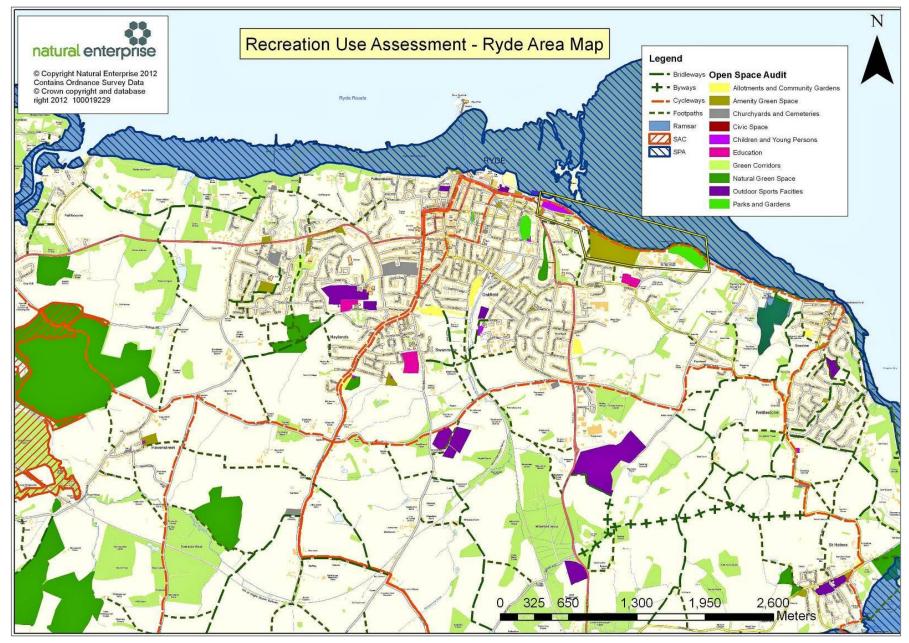


Figure 1 Ryde Area Map showing European bird sites and nearby open spaces; visitor survey area shown as boxed.

Medina

- 3.5 The River Medina connects the Isle of Wight's County Town of Newport to the Solent at Cowes and East Cowes, a total resident population of over 40,000. The valley remains a busy working commercial water body and receives a variety of commercial and private water craft throughout the year. Marinas and wharfs are working or being redeveloped along both banks of the river.
- 3.6 Figure 2 shows that recreational access to the west side of the river is provided by the National Cycleway 23 between Cowes and Newport (also footpath and bridleway). The east side of the river is similarly accessible but only by footpath between Newport and The Folly Inn at Whippingham, stopping short of East Cowes and so not completing a circular connection with the west bank access. There are important blocks of public open space at Riverside Park on the west side, and Seaclose Park on the east.



River Medina at low tide

3.7 The Isle of Wight Green Infrastructure Project: Medina Area Action Plan (AAP) and Green Infrastructure (GI) Report⁴ provide details of open space provision in the study area. The report highlights the combination of a conservation designated estuary, with a 'working river'. The cycle track along the west bank of the river is mentioned and it is

⁴ The Isle of Wight Green Infrastructure Project Ryde Area Action Plan and Green Infrastructure

noted that "provided safeguards are built in to ensure that users and their dogs keep to the route then there are unlikely to be significant impacts upon interest features of the European site." Along the east bank close access to the riverside is made easier and there are stretches where there is no vegetation or other cover between the visitor and the estuary. It is possible that this route may in the future be upgraded for use by walkers, cyclists and horse-riders.



Wigeon and brent geese between The Folly and Island Harbour

3.8 There are a number of official and unofficial car parking locations along the Medina, all those situated outside of Newport town are free.

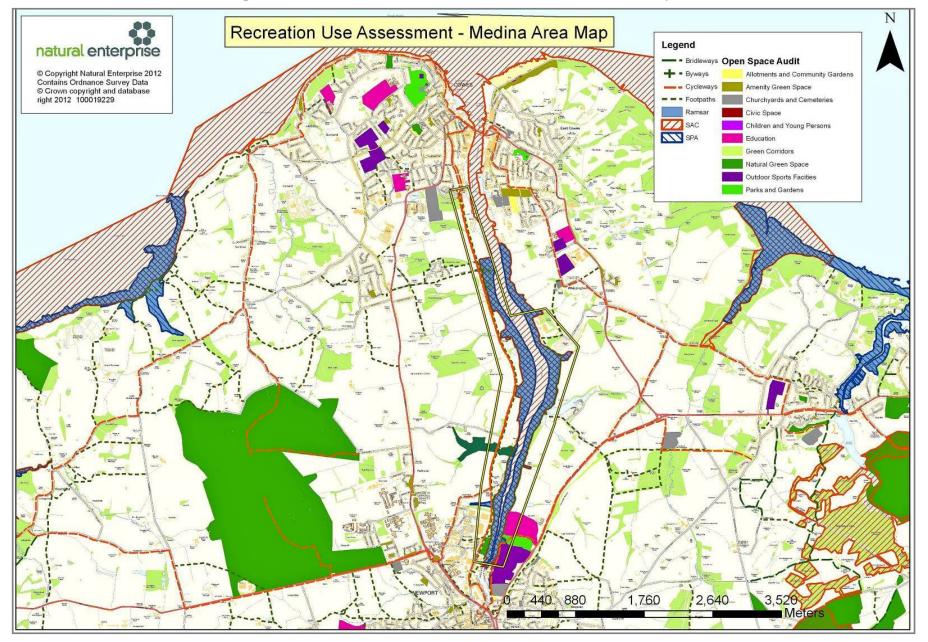


Figure 2 Medina Area Map showing European bird sites and nearby open spaces; visitor survey area shown as boxed.

4 Desk-based Study

4.1 There is published and otherwise publicly available information relating to the work of this project, the nature and significance of recreational activity in the project areas (and elsewhere on the Island) and the impacts of recreational disturbance on protected wintering bird sites. Below is a summary of the most relevant information.

Isle of Wight Council Core Strategy

- 4.2 The IWC Core Strategy Examination Core Document Library⁵ includes Core Strategy

 Documents and Environmental Assessments. The adopted Island Plan was published in March

 2012⁶
- 4.3 The core strategy comprises a series of development plan documents (DPDs) and supplementary planning documents (SPDs).
- 4.4 The key DPDs that set the context for this recreational impact assessment are the Medina and Ryde Area Action Plans anticipating the need for significant change or conservation and focussing on the delivery of area based regeneration initiatives.
 The land that falls within boundaries of the AAPs can be considered in principle for a range of uses, including residential, employment, leisure and greenspace. The AAP process also identifies which land uses would not be considered appropriate and for which reasons.
- 4.5 In both Medina and the Ryde AAPs there are dense centres of existing population, as well as development sites identified for further strategic housing needs in close proximity to intertidal areas designated for the international significance of their wintering bird populations.
- 4.6 The degree to which these features of the AAPs are in conflict is clearly of fundamental concern to the Core Strategy.

 $^{5\} http://www.iwight.com/living_here/planning/images/01CoreDocumentLibraryListv10.pdf\\ 6\ http://www.iwight.com/living_here/planning/images/4CoreStrategy-AdoptedMar0.pdf$

Green Infrastructure

- 4.7 One such area of conflict is winter recreational pressure. This can and does include organized group activities such as sailing and kite-boarding; the focus in this report is the impact of people and dogs walking on or alongside European conservation sites at times when large numbers of feeding or roosting birds are likely to be present.
- 4.8 An important aspect of recreational disturbance to European sites is of course the means of access; the degree to which recreational activity can take place on-site or nearby is heavily influenced by the distribution of publicly accessible open space⁷.
- 4.9 The distribution and role of amenity spaces across the landscape-scale of the AAPs, and in particular their European conservation sites, is considered as a part of the Core Strategy's Green Infrastructure SPD⁸ and constitutes development management policy (DMP) 13 in the adopted Island Plan.
- 4.10 For the purposes of spatial planning Green Infrastructure is a network of multi-functional open spaces designed and managed to support biodiversity and a wider quality of life, particularly in areas undergoing large-scale change.
- 4.11 The Conservation of Habitats and Species Regulations require a precautionary principle to be applied to planning zones such as the AAPs so that only projects ascertained to have no adverse impact on the integrity of the European site may be permitted.
- 4.12 Both Natural England and IWC are therefore in the process of assessing the potential impact of new recreational pressures, stemming from AAP development, on the Medina Estuary and Ryde Sands bird sites.
- 4.13 Green Infrastructure, as defined in paragraph 4.2.4 is potentially both a facilitator of recreational pressure and a source of mitigation in these areas and it is this balance that is explored in this study.

⁷ http://www.iwight.com/living_here/planning/images/OpenSpaceAudit-April2010.pdf 8 http://www.iwight.com/living_here/planning/images/IoWGIReport-FINAL250810.pdf

The Solent Disturbance and Mitigation Project (SDMP)

- 4.14 A Solent-wide study concerned with the impact of recreational pressure on features of the Solent SPA, SAC and Ramsar Sites. In particular the study focussed on pressures resulting from proposed new housing developments. Phase I⁹ of this project involved:
 - a. Collation of existing data on the distribution of housing and human activities around the Solent
 - b. An assessment of stakeholder opinion of the importance of recreational disturbance on birds
 - c. Collation of data on bird distribution and abundance
 - d. An outline of the range of mitigation measures that could potentially minimise the impacts of increased recreational disturbance caused by increased housing in the Solent area.
- 4.15 The SDMP report identified users of the Solent area and highlighted that dog walkers and bait diggers are of particular concern on the Isle of Wight. The report identified a number of mitigation examples which are transferrable to the Island, for example that disturbance was reduced to a protected area off the Hamble named Hook Links by utilising fencing and ditches, controlling users' preferred routes.
- 4.16 An important conclusion of the Solent SDMP is that the particular character of the green infrastructure used as a place to visit is itself significant; it is not just a matter of being the nearest or most convenient open space. It is further suggested that new green space, if intended to divert people from a particular sensitive habitat, would need to be "specifically targeted and designed and be different to the existing green space sites" (Clarke et al., 2008).

⁹ Stillman, R. A., Cox, J., Liley, D., Ravenscroft, N., Sharp, J. & Wells, M. (2009) Solent disturbance and mitigation project: Phase I report. Report to the Solent Forum

4.17 Table 2 details the full mitigation measures considered by the SDMP Phase I Report.

Table 2 Solent mitigation - table extracted from Phase I Report 9

Mitigation	Notes / description
measure	
Off site	
Provision of alternative sites	Currently little evidence has been collated to demonstrate effectiveness. Provision may need to be combined with other measures such as education and on-site management on the designated site. Likely to need to be carefully designed and targeted so as to provide a viable alternative. Targeting for dog walkers would need to ensure dog friendliness(Edwards and Knight, 2006) and suitable routes (e.g. Liley et al., 2006b, Liley et al., 2006c). For water-based activities gravel pits or similar may need careful landscape design and particular types of infrastructure. Further work needs to be done on the specific qualities of green space most valued by people. For example it has been shown that untrained observers are capable of determining which landscapes have greater biodiversity, and that the health and well-being benefits experienced increase with the biodiversity content of green landscapes (Fuller et al. 2007).
Education	Potential to promote non-designated sites, for example through web / leaflets listing dog friendly sites. Local media, papers etc can provide a means to highlight conservation importance of sites and encourage responsible access.
Changing by- laws at particular locations	Allowing dogs off leads etc in particular locations that are not sensitive for nature conservation or other reasons mayincrease their attractiveness to dog walkers.
Review of parking charges	Cheap or free parking at particular locations may encourage visitors. Reduced parking fees in the early morning maybe particularly effective in encouraging dog walkers.
On site, shore- based	
Wardening	Wardens can provide face to face contact and can directly intervene when they observe particular activities (such asdogs off the lead on mudflats). They can have an educational role, showing people wildlife etc.
On-site education	Ensuring visitors are aware of the conservation importance of sites should help encourage responsible access.
Landscape design and careful design of routes	Planting, screening, careful routing, provision of access infrastructure (boardwalks, marked paths, steps etc) can allinfluence visitor flows within sites and the potential of people to cause disturbance. Subtly directing people along theinside of borrow-dykes or below seawalls can mean they are invisible to birds on the mudflats.
Architectural Design	Much can be done with architecture near to the mudflats to reduce potential impacts, including considerations of layoutand massing, arrangement of glazing and balconies and lighting design.
Control of parking Modification of parking charges	Limiting car park spaces or closing car parks in particular locations is likely to be contentious, but is likely to be effective in reducing visitor numbers. Changing parking charges to reflect a higher cost during particular times of year or times of day may encourage peopleto choose alternative locations.

- I	
By-laws	Bans on dogs, the requirement for dogs to be on leads or fines for dog fouling
	may encourage dog walkers not to use particular areas.
Control of	Particularly disturbing events such as firework displays or concerts near the
Strategic	foreshore can be subject to more stringent planning control.
Events	
On site, water-	
based	
Careful	Provision of public slipways, trailer & vehicle access to shore etc. in
provision	predetermined locations where boat access islikely to be away from bird
offacilities	interest.Pro-active work with clubs and groups Self-policing is ideal as it is low
	cost and self regulating – example would be water-skiing club revoking
	membershipfor anyone caught speeding (Defra, 2004).
Education	Information on access points, speed limits, zoning etc easily accessible to all,
	through leaflets, web etc. Reasons for zoning etc should be carefully explained.
Zoning	Designated areas for particular activities.
Permits /	System of normits or similar to limit numbers and maintain records. Should
vessel	System of permits or similar to limit numbers and maintain records. Should
	enable a mailing list of particular users tobe maintained.
registration	
Policing	Policing of watercraft zoning, speed limits etc, with fines or other penalties for infringement
By laws	Bylaws to control particular activities and set speed limits
Monitoring	Monitoring and scientific study is not direct mitigation. However, in recent years
and Scientific	developers havesecured agreements to undertake detailed monitoring of
Study	waterfowl from the SPAs/Ramsar sites to increase our knowledge base, to inform
	future management and land allocations. This has assisted in cases where the
	science was simply insufficient for the mitigation to be designed with
	anyconfidence in effectiveness or value for money and grounds for refusing
	development were thin (e.g. inland sites usedby Brent Geese remote from the
	intertidal zone of the Solent).
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- 4.18 Phase II of the SDMP¹⁰ assessed the impact of current visitor numbers and activities on the survival rates of shorebirds. Results identified that out of a total of 1382 completed questionnaires returned 42% of these households had visited the coast the week prior to completing the survey.
- 4.19 The most frequently given activities undertaken during a coastal visit were walking (20% of all activity responses) and enjoying the scenery (20%), followed by being on the beach (11%) and meeting up with friends (11% of all activity responses). It was found that dog restrictions (bans as well as on-lead controls) were attractive to non dog owners and dissuaded dog owners from using particular stretches of the coast.

¹⁰ Fearnley, H., Clarke, R. T. & Liley, D. (2011). The Solent Disturbance & Mitigation Project. Phase II – results of the Solent household survey. ©Solent Forum / Footprint Ecology.

- 4.20 The Phase II of the SDMP reported that "By far the most popular attractive feature when households choose which coastal location to visit was 'sea views and attractive scenery' followed by 'feel safe', 'ability to do a range of different walks/routes 'and the 'presence of wildlife'."
- 4.21 Phase III will predict the impact of future changes in housing density and assess associated mitigation measures on the number of people visiting the Solent, and the associated impact on the survival rates of shorebirds.

The monitoring of signage placement at high water waterbird roost sites along the Medina Estuary (2010)¹¹

4.22 The Kingston Mitigation Working Group identified that it was necessary to reduce disturbance to the main high water roosting sites on the Medina. The report looks at the effectiveness of a leaflet and poster campaign for dinghy users along with five signs placed at the most sensitive sites. The principal aim of the leaflet and signage was to prevent watercraft landing on the mudflats and this appeared to be successful. It was reported that the signage used to deter angling was not as successful. The report suggests that further education work is required with the anglers to reinforce the messages on the signs.

Village Networks Scheme D512

4.23 This work, focussed on West Wight, investigates the better use of green space and the rights of way network. It identifies a number of actions to help change behaviour. Of these suggestions a number are transferrable to the sites covered by this report, such as better information about the routes and paths available and better on-site signage. 'Walks with focus' are mentioned, the use of public events and themed routes to highlight a local environmental issue (which might be the biodiversity and fragility of that environment). Improvements to the public access infrastructure are a key issue, ensuring there are sufficient easy access routes for all users.

¹¹ Marston, K. (2010) The monitoring of signage placement at high water waterbird roost sites along the Medina Estuary. A report for the Isle of Wight Estuaries project. http://www.medinavalleycentre.org.uk/bird-publications.php

- 4.24 Barriers to the use of rights of way identified by the Village Networks Scheme D512 (March 2011) include:
 - a. not knowing where to go/poor orientation
 - b. lack of path maintenance
 - c. poor or absent signage
 - d. stiles
 - e. persistent dog fouling

Solent waders and Brent Goose Strategy 2010¹³

4.25 The report looks at how brent geese and waders use a number of survey sites within the Solent protected areas and including the Medina Estuary and Ryde Sands. Local issues such as site protection, development pressure and disturbance were considered along with the impacts of sea level rise and coastal squeeze. The report highlights the increasing need for recreational space and identifies the role of diverse green infrastructure provision as important in reducing pressure on sensitive habitats. The strategy identifies current important and vulnerable sites in the hope that they can be protected. The Solent Waders and Brent Goose Project Steering Group recommends the strategy to be used as an evidence base for considering all relevant planning proposals and ideally used to inform future strategic plans including Development Plan Documents and Supplementary Planning Documents.

¹² Stichbury, H. (2011) Village Networks Scheme D5: Public consultation to identify what would encourage more people to walk and cycle in the West Wight

¹³ King, D. (2010) Solent Waders and Brent Goose Strategy 2010. Hampshire and Isle of Wight Wildlife Trust.http://www.solentforum.org/forum/sub_groups/Nature_Conservation_Group/Waders%20and%20Brent%20Goose%20Strategy/Solent%20Waders%20and%20Brent%20Goose%20Strategy.pdf

Medina Estuary Management Plan (MEMP)14

- 4.26 The MEMP, revised in 2000, was produced to meet the perceived need for an improved management of estuary and the coast. It was a non-statutory initiative which recommends an integrated approach to the management of estuary resources and the activities which take place on and around the Medina.
- 4.27 The MEMP was produced by IWC with assistance from a steering group of other organizations and agencies.
- 4.28 The vision of the MEMP was to achieve the sustainable use of the Medina Estuary through the integrated management of its resources by ensuring that a balance is secured between the protection and enhancement of the natural and man-made environment and the continued development of the local economy.
- 4.29 The plan proposes five recreation policies for the estuary:
 - a. To provide adequate and appropriate access onto the water.
 - b. To improve the quality and provision of footpaths and cyclepaths.
 - c. To improve facilities for yachtsmen visiting Cowes and Newport Harbours and the Harbour Authorities' moorings.
 - d. To promote the responsible use of the estuary as a recreational resource while minimising the conflict with and between other users and interests.
 - e. To improve the water quality of the estuary.

¹⁴ http://www.iwight.com/living here/environment/estuaries/island estuaries/medinaes.asp

5 Medina Survey Results and Analysis

5.1 Survey times were spread out to cover a range of likely visiting times: weekends, weekdays, early mornings and lunchtimes.

Date	Time	Location covered	Weather	Tide	Number of people seen	Number of People interviewed	
14/12/11	14.55	Riverside Park area, Stag	Cold and	Low	6	6	
	-	Lane / Dodnor Creek,	dry				
Wednesday	16.30	Medham Wharf area					
15/12/11	08.15	Fairlee outfall to field	Cold and	Low	3	3	
	-	behind Saro site	dry				
Thursday	09.45						
20/12/11	07.45	Medham Wharf to	Mildish	High	7	7	
	-9.00	Riverside Park	and dry				
Tuesday							
13/1/2012	08.30	East Bank	Cold and	Low	3	1	
	_		bright				
Friday	09.45						
16/1/12	12.00	Folly to Fairlee Sewage	Cold and	Mid -	7	5	
	-	Works	clear	low			
Saturday	13.30						
17/01/12	14.00	Folly to Fairlee Sewage	Cold and	High	12	7	
	-	Works	Sunny				
Sunday	15.30						

5.2 Pattern of use

- a. There is a significant difference in the volume of visitor usage between east and west banks of the Medina, with most activity on the west side.
- b. The main locus of activity on the west side of the Medina stretches between Riverside Park and the Medina Valley Centre; this is particularly so for dog walkers.
- c. Most dog-walkers on this stretch had parked in the Riverside car park. As well as for exercise and recreation this area was used by people attending the adjacent veterinary surgery.

- d. The main visitor activity on the east side was concentrated at and between the car parks at the Folly Inn and Island Harbour.
- e. Early morning visitors were concentrated nearer to Newport (Riverside Park) than at other times on the west bank and similarly on the east bank in and around Seaclose Park.
- f. There was an overall perception amongst visitors of the west bank cycleway being more readily useable in the winter than the east bank footpath which was regarded as generally muddy and in places treacherous.
- 5.3 Frequency there was approximately a 50/50 spilt between people using their route along the Medina daily and those who varied it with other nearby locations such as Carisbrooke Castle, Firestone Copse, Shanklin Beach and Parkhurst Forest.

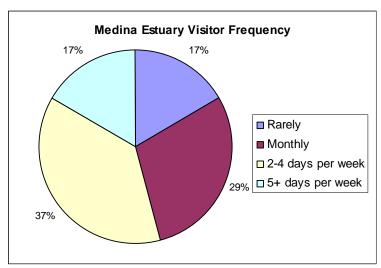


Figure 3 Medina Visitor Frequency

5.4 Seasonality

- a. Most people visited year-round but some mentioned alternatives which were more weather dependent than seasonal.
- b. The west bank seemed to appeal to people who wished to exercise their dogs where they would not get too muddy.
- 5.5 Length of Visit The length of visit varied widely, the longest staying visitors were the fishermen.

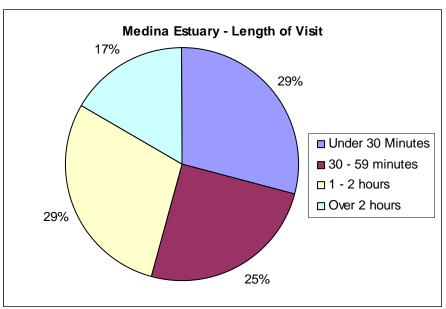


Figure 4 Medina length of Visit

5.6 Normal time of visit

- a. The busiest times were weekend lunchtimes around the Folly, and mornings near to Newport.
- b. There were surprisingly few dog walkers on the west bank cycle track at commuting times. Some users indicated that this was due to the potential conflict between cyclists and dogs.

5.7 Route

- a. Activity on the east side of the Medina occurs predominantly between the Folly and Island Harbour; some join the path at the Newport Arboretum where there is a free car park and then walk on to Island Harbour.
- b. Most of the walkers on the west bank were encountered between Riverside Park and Medina Valley Centre.

5.8 Mode of transport

- a. Most east bank walkers had arrived by car and parked in one of the free car parks, either the Folly, Island Harbour or at the Arboretum.
- b. Most of the west bank walkers had parked at the Riverside Park car park.

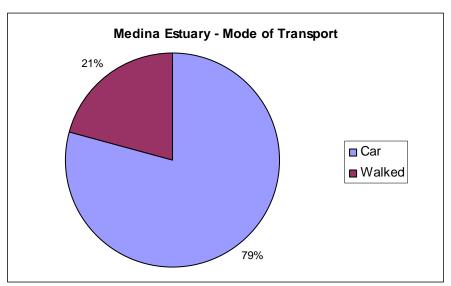


Figure 5 Medina mode of Transport

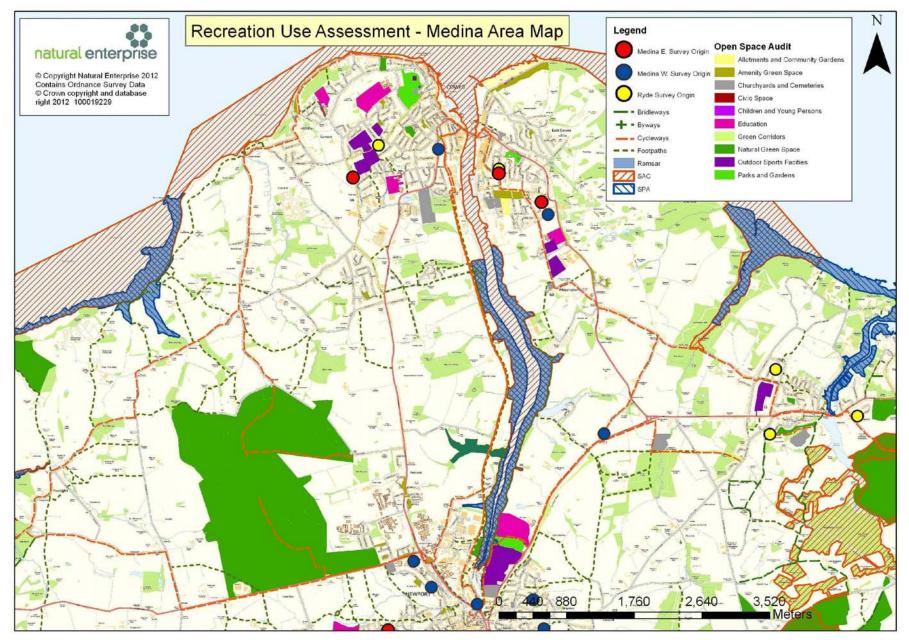


Figure 6 Medina Area Map showing visitor origins

5.9 Main reasons for coming to Medina

- a. Proximity to Newport
- b. Liked the river
- c. Users liked the cycle track because it is dry and the dogs do not get too muddy; this suggest a reluctance amongst visitors to allow dogs down onto the river bank, although this was not always the observed pattern of use.
- d. Users of the Medina interviewed did not express a particular passion for their local walk in the way that those in the Ryde survey did.
- e. The east bank was appealing to one interviewee because of the good visibility; it was important for her to be able to anticipate well ahead the need to put her nervous dog on the lead.



Early dog walker from Island Harbour

- f. One visitor had just finished lunch at the Folly and was taking his dog for a short walk; he was parked at the Folly and would walk for only a few minutes before returning.
- g. A couple of dog walkers on the east bank mentioned enjoying the views of the river

en route to the Island harbour café or the Folly Inn.

h. The attraction of the wildlife and countryside of the Medina valley was clearly important to some and these would be pleased to be given the opportunity to help in the protection of local wildlife.

5.10 Winter alternatives

a. Some reported going to Carisbrooke Castle or Parkhurst Forest in the winter. The Castle was thought too muddy at times. Parkhurst was thought a good option in bad weather because of its shelter.

5.11 Birds

- a. Most of the dog walkers interviewed were interested in the estuary birds but few had more than a basic knowledge and there was little understanding of the Medina's particular seasonal importance for particular species. The level of knowledge was highest amongst the fishermen. The bait diggers were the only group that, while aware of the birds, expressed no interested in receiving further information about them.
- b. Of the dog walkers interviewed most agreed they would be happy to control their dogs in sensitive areas if these were made clear to them.
- c. Several people insisted that their dogs were always under control, but the behaviour of dogs observed, sometimes during the same interview, sometimes indicated otherwise. This may highlight the differences in the definition of 'control'.
- d. Some visitors said that they would often feed birds on their walk.
- e. Most dog walkers seemed unaware of the potential problems of bird disturbance,
 but would be happy to co-operate if there was some form of guidance or advice.
 The fishermen interviewed were more aware of the wildlife of the river.
- f. One interviewee noted that their dog sometimes chased the geese in the fields between Island Harbour and The Folly when it followed the ball in that direction.

5.12 Bait Diggers

- a. Would visit the Medina about once per week as it is considerably cheaper than buying bait from a fishing shop.
- b. Most park at Island Harbour or Seaclose and dig between the two they also use the Dodnor Creek wall.
- c. It takes about an hour to dig a pound of bait worms.
- d. Most bait diggers head to the coast to fish, often Bembridge or Wootton; the Medina can be convenient en-route stop.
- e. There is believed to be some competition between commercial and private diggers.
- f. Bait diggers feel the birds get a good deal. They stick very close to the diggers and root through the freshly dug mud when the men move on.



Bait digging on the Medina

- g. Bait diggers are unlikely to be interested in signs and additional information about the Medina's birds.
- h. One bait digger noted that he would not take his dog with him because it is too muddy.



Bait diggers' access at the Folly

5.13 Fishermen

- a. The fishermen interviewed were participating in a flounder competition; the Medina used to be an excellent location for this fish but has by all accounts recently declined.
- b. The start of the bay south of The Folly is a favoured location because of the free and nearby parking.
- c. Fishermen were likely to use this spot perhaps a couple of times per year.
- d. The normal winter alternative for those interviewed is Yarmouth.
- e. The fishermen agreed they would be interested in a board about the Medina and its birds but thought it unlikely that they would need to alter their activities.

5.14 Observations, dogs

- a. Dogs on the west bank were mostly off the lead; disturbance appears to be limited due to the physically constraining nature of the path and its distance from the water's edge and consequently the lack of opportunity for dogs to access areas that might be used by birds.
- b. Dogs on the east bank were seen to be kept on the lead for parts of the visit, sometimes a significant proportion.

5.15 Observations, general

- a. Some visitors were initially hard to engage because of their own issues with litter, cyclists, the Council and the Festival.
- b. Bait diggers were observed at a distance at Island Harbour. These did not seem to be disturbing redshanks and oystercatchers feeding within 10m.
- c. Dog walkers along the cycleway are generally concerned about the risk to their dogs posed by speeding cyclists.

6 Ryde Survey Results and Analysis

Results and Analysis

6.1 Survey times were spread out to cover a variety of visiting times: weekends, weekdays, early mornings and daytime. On each occasion most of the route was covered though naturally more time was eventually spent where we found there were more people.

Date	Time	Location covered	Weather	Tide	Number of people seen	Number of People interview ed
14/12/11 Wednesday	7.40- 9.30	Wimpy Bar to Appley Tower	Cold and dry	Low	11	11
15/12/2011 Thursday	9.45– 10.45	Wimpy Bar to Marina	Cold and dry	Low	2	2
08/01/2012 Sunday	12.00 - 14.30	Ryde Sands west of pier to Appley Beach	Warm and dry	Medium to Low	50+	32

Figure 7 Ryde Sands Surveyor Visit Details

6.2 Pattern of use

- a. Most activity occurs between the Appley In-shore lifeboat station and Puckpool Point.
- b. Whilst the free parking at Appley Park is a strong incentive for those who arrive by car, this was also the most popular area for those who came on foot.
- 6.3 Fewer people were interviewed walking their dogs west of the canoe lake.

6.4 Frequency

- a. Very few people were casual visitors, 79% visited the Sands at least twice a week.
- b. All casual visitors were encountered at weekends; the weekday interviewees were all regular visitors.

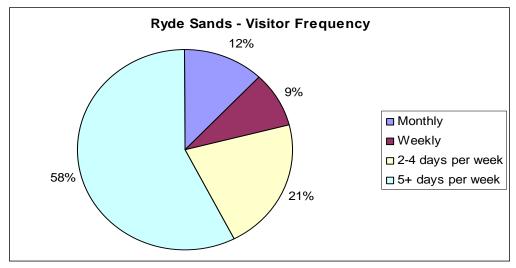


Figure 8 Ryde Visitor Frequency

6.5 Seasonality of visits

- a. Nearly all those interviewed visited the area the year round; when the dog ban is in place they will walk along the Esplanade to Appley Tower, and then drop onto the beach as they walk east.
- b. Only three people avoided the beach in summer because of the dog ban.
- c. Several people commented that Appley Park itself was not suitable for dog-walking in the winter as it becomes too muddy.
- d. Many dog walkers differentiated between dogs getting muddy in fields and woodland, and getting sandy on the beach; a muddy dog was thought of as much more problematic than a sandy dog.

6.6 Duration

- a. The length of visit varied between 30 minutes and 2 hours.
- Even on the early morning visit, when it could be assumed that most people were walking before work, the majority of people spent at least 30 minutes on the Sands with their dogs

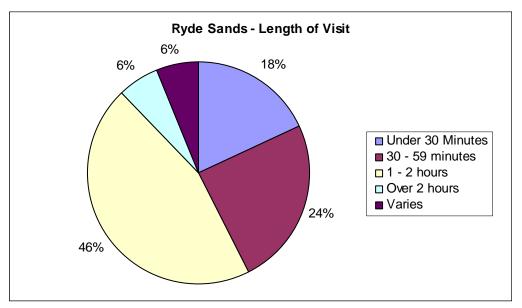


Figure 9 Length of visit

6.7 Normal time of visit

- c. The busiest periods were weekends.
- d. Most people tended to visit at set times of the day, and several people said they visited twice daily.
- e. There is a noticeable camaraderie and familiarity in the association of dog walkers using the beach in the early mornings; some commented that they would certainly recognize other dogs even if not their owners.
- f. The state of the tide did not appear to affect the time of visit.

6.8 Route

- a. Most people accessed the sands by the In-shore lifeguard station, whether they drove or walked to the site.
- b. Once on the beach at Appley, most people walked east to Puckpool Point, some would then go further towards Seaview depending on the tide.
- c. In summer, with the dog ban in place, most people modified their route rather than avoid the area.
- d. The great majority of those interviewed and observed were using the beach east of the lifeboat station, few ventured west of this point.

6.9 Mode of transport

- a. 58% of all visitors arrived by car (see Figure 10).
- b. 62% of people with Ryde postcodes arrived by car.
- c. All but one person who arrived by car had parked in Appley Car Park. Appley Car Park offers free parking. Parking is free along the Esplanade until 10 am, but this did not entice the early morning visitors to park there.
- d. During all three visits there were available parking spaces seen along the length of the Esplanade.

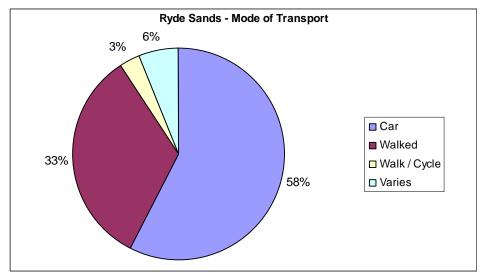


Figure 10 Ryde, modes of visitor transport

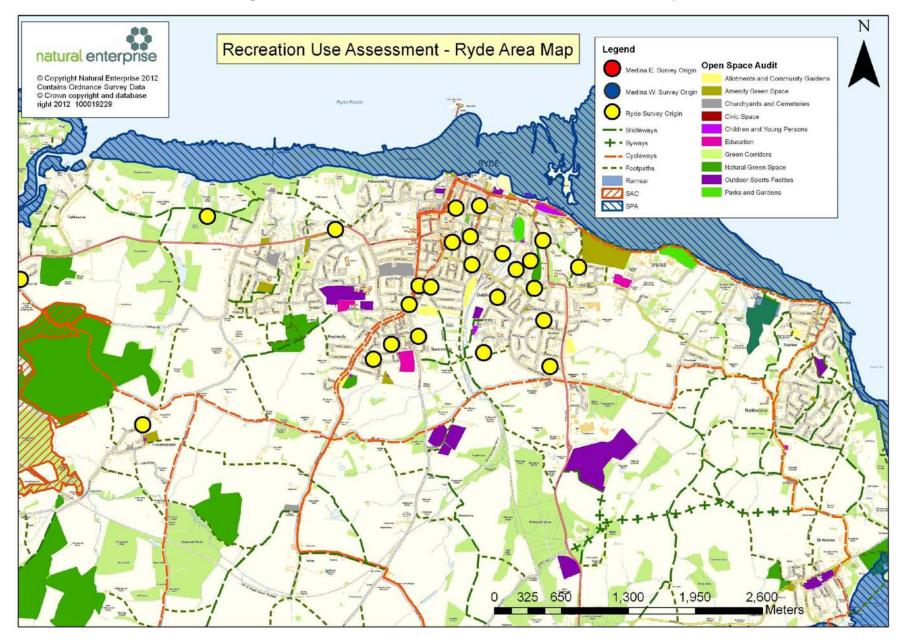


Figure 11 Ryde Area Map showing visitor origins

Main reasons for coming to Ryde

- a. Most people loved the setting above all, the views and extent of Ryde Sands and considered it a special place, not just a convenient place. There was a very strong sense of both entitlement and appreciation, even gratitude (for the beach being there) in the responses given by interviewees. This is markedly different to the more utilitarian attitude of those in the Medina study.
- b. The majority of those interviewed visited to walk their dog/s but some at the same time were interested in the views, personal exercise and company.
- c. Several people liked the Sands because the dogs could safely run free; some dogs were nevertheless kept on leads
- d. One person came from Cowes and combined it with a trip to the car boot sale at LA Bowl.
- e. Free parking was an attraction.
- 6.10 Figure 11 shows that most users surveyed on Ryde Sands originated from Ryde town as might be expected, but it is interesting to note that there is a quite distinct partition, at the Swanmore / Ashey Road, between the communities of Ryde and Binstead.

Winter alternatives

- a. For many people the Sands are the only place where they will walk their dogs.
- b. First alternatives used included Firestone Copse, Rosemary Lane and Seaview Duver Beach. Also visited but less popular were Wootton and Binstead recreation grounds, Ryde Golf Course, St Johns Park, Yaverland and Culver, and Brading Downs.

Birds

- a. Most of the dog walkers expressed an interest in birds.
- b. When asked to list birds seen, many responded with non-sea birds such as wagtails (most frequently mentioned) and crows, or generic terms such as gulls, ducks and geese.
- c. A few people recognised the more common sea birds such as cormorants, little egrets, mute swans and herons.
- d. Three people mentioned sanderlings specifically; two mentioned curlews and one mentioned oystercatchers.
- e. Not one person interviewed was aware of the international significance of Ryde Sands to winter waders.
- f. Of the dog walkers interviewed most agreed they would be happy to control their dogs in sensitive areas but would not support a ban.
- g. Several people acknowledged that some dogs were problems off-lead, but not their dog.
- h. Most dog walkers seemed unaware of the potential problems of bird disturbance but would be happy to co-operate if there was some form of guidance/advice and the problem was explained.
- i. Not everyone said that they would read an interpretation board.

7 Discussion

Differences

- 7.1 The interviews and the analysis of results suggest a generalised difference between the attitude and motivation of the recreational users of the Medina and those at Ryde Sands.
- 7.2 Medina users are, in a way, in transit or en route; both on the east and west banks their visits do not occupy the protected areas, they skirt them and in a sense the estuary itself is secondary to the convenience of well-placed car parks and hard-surfaced paths. The impact on the protected areas is then diffused.
- 7.3 Ryde users visit the Sands because of the special attraction of the place and the setting: the protected area is the primary focus and the recreational activity concentrates on and around it creating a quite specifically located impact.
- 7.4 Perhaps as a consequence of this Medina users show a lower level of awareness of, and interest in the presence of birds in the estuary than those on Ryde Sands; the possibility of close interaction between user and birds is much more a feature of Ryde than Medina.
- 7.5 There is a strong sense of loyalty to the Appley Puckpool sands amongst Ryde users and something like a club of regular dog walkers. There does not seem to be anything comparable along the Medina though it may be that further investigation would find something similar at sites such as Riverside Park.
- 7.6 It is important then to consider that some recreational sites are popular because of their unique or distinctive characteristics and not just because of their convenience or availability. This might on the one hand lead to an acceptance that some sites have such a strong sense of place (such as Ryde Sands at Appley) that strategies to deflect or distract visitors are unlikely to succeed; on the other it leads to an understanding that the design and creation of new green infrastructure must have distinctive character at its heart if it is to succeed.
- 7.7 There is a more widely spread visitor catchment using the Medina estuary GI but this would be expected given the position of the resource, the various points of access and the communities north, south, east and west that are in easy reach. What is very

striking at Ryde is not only the dense concentration of nearby residents using the GI but the abrupt cut-off along the line of Ashey Road/West Street and the division this suggests between the main town and its preference for Ryde seafront, and the west town and Binstead which might be presumed to favour sites such as Firestone Copse.

Similarities

- 7.8 The predominant recreational pressure observed at both study areas is that of walkers with dogs.
- 7.9 Both sites show a strong correlation between busy stretches/areas and nearby free car parks. It is useful to note that even when paid parking is widely available within green infrastructure free parking will still act to concentrate activity and to some extent determine which are the most heavily used parts of a larger greenspace.
- 7.10 Visitor feedback suggests that both sites provide essential features for dog walking: good visibility over a wide area or long distance in order to i) know where the dog is; ii) anticipate the need to call back or control the dog, and iii) avoid such situations by virtue of the expanse or extent of open space available to users.

Other observations

- 7.11 Although not seen as creating a significant recreational impact (low numbers and sporadic appearance), fishermen and bait diggers provided interesting responses to the questionnaire.
- 7.12 Fishermen expressed a keener interest in knowing about local birdlife and the significance of the protected areas than did bait diggers and yet these could conceivably be the same people at different times. Both groups demonstrated markedly better identification skills than the dog walkers interviewed.
- 7.13 It might be that this offers ideas for a connection between types of recreational activity or the locations of recreation, and the opportunity to provide meaningful and relevant information.
 - For example, the linear, more confined 'point to point' walking along the Medina perhaps reduces the time and opportunity to stop and observe. A similar visit at Ryde Sands however is more likely to result in the dog exercising itself and the walker stopping to talk to others, standing watching/waiting or sitting on the Esplanade.

8 Recommendations

8.1 Below are suggestions, drawn from the analysis and discussion of visitor survey results, for projects and interventions in the green infrastructure that sits alongside the SPA/Ramsar designations at Ryde Sands (east) and along the Medina estuary. These works are intended to enhance the role of GI in mitigating recreational disturbance to wintering birds.

Ryde

8.2 Accept that it is unlikely that winter dog walking at Appley can be significantly deflected to other GI and instead deliberately focus visitor activity in the honey-pot zone between Appley and Puckpool. It is likely that the capacity of this area to support significant numbers of wildfowl and waders has already been damaged.



High water at Ryde Beach East: Puckpool - Appley

8.3 However, by drawing in more of those dog walkers and others who use the beach west to Ryde Marina (See Figure 12) it would be possible to reduce pressure on the Wimpy wader roost beaches at high tide and the important intertidal feeding between the end of the canoe lake and the Monkton Mead outfall. By so differentiating the GI along the shore to dilute at least to some extent the concentrated visitor pressure on the beach, disturbance to the more valuable feeding and roosting areas west of Appley might be steadily lessened.

- 8.4 Direct practical measures that could be taken to achieve this include (see Figure 12):
 - Dissuade users from directly accessing the Sands west of the breakwaters from the Esplanade by using physical barriers e.g. the storm boards in place across each entry point.
 - b. Interpretation and signage to nudge behaviour highlight the special character of Ryde Sands in such a way that the idea of a 'bird beach', corresponding with that section of Ryde Sands that is already less visited, becomes a natural stepping stone to visitors choosing to not walk this part as a virtue.

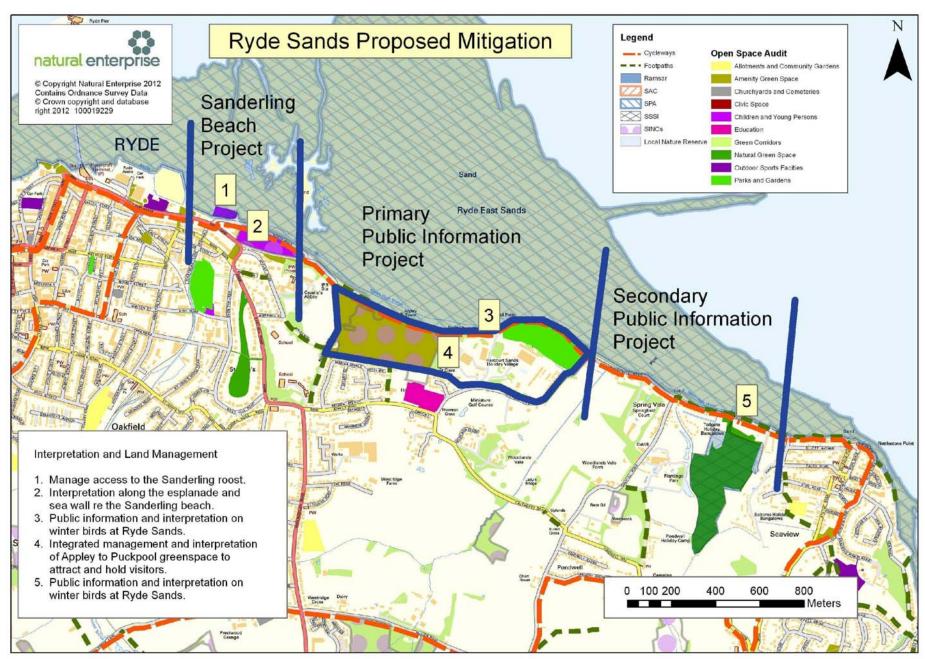


Figure 12 Map of Ryde showing recommendations

c. Use the sanderling as a 'champion' species in this interpretation rather than attempt to explain the whole spread of winter bird use at Ryde Sands. The fact that the beach is truly of international importance for this species is sufficient to potentially carry the full story of the protected areas. Sanderling is familiar, easily identified and visible at high and low tide; it is dependent on responsible visitor behaviour for its rest and safety at the Wimpy roost and likely to leave the Island altogether if too often disturbed; these are the elements of what could become a compelling public message.



Sanderling beach

d. Improve the appeal of Appley Park and the orientation between the Appley car park and the 'green' park to better balance the immediate draw down to the Esplanade and beach. If the honey-pot approach is to work as a means of adjusting the balance of visitor pressure within Ryde Sands, drawing people east, then Appley car park, Appley Park, Puckpool Park, Puckpool car park and inevitably at some point Harcourt Sands in between must work as a whole. The capacity of this area to attract and hold visitors and to mix access to the beach with access to an appealing hinterland is considerable and it is vital that every part of it is exploited to this end and that the attraction of the whole persists through the winter.



Play equipment at Puckpool

e. The role of the free car park at Appley in drawing visitors to the eastern end of the Sands is an important one. On the one hand this is perhaps at the root of the concentration of recreational pressure on wintering birds in Appley bay, on the other it is, in part, the reason for a reduced visitor presence west of the breakwaters where significant bird activity remains.



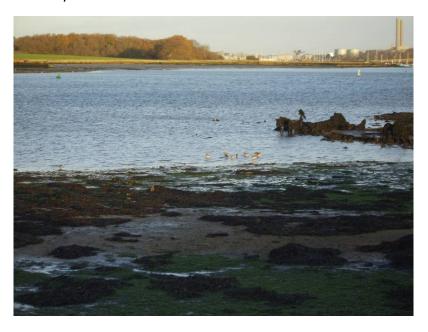
Puckpool carpark

f. Any change in the balance and distribution of paid and free parking on the esplanade will influence visitor behaviour locally. It is recommended that present conditions persist as either all-pay or all-free winter parking removes the differential that supports a managed '2 beach' mitigation strategy to deal with recreational disturbance.

g. Begin and sustain a programme of events and information dissemination in Ryde that builds a local sense of pride in the international importance of Ryde Sands for wintering birds and repeat these messages at every opportunity. Make the sanderling a symbol of Ryde in the same way that the wall lizard has become a symbol of Ventnor, a conservation priority that is embedded in the way the town thinks of itself. Make allies of those who run the swimming pool café, the Wimpy, Appley café and Puckpool café so that the 'bird beach' message is positively reinforced throughout the year.

Medina

- 8.5 The conclusion of the Medina investigation is that there is a less significant and damaging concentration of recreational pressure on the wintering birdlife of the estuary. Visitors on the west bank are largely hidden from the water and will tend to want to keep their dogs close to them and in sight along the length of the cycle way. Those using the east bank are either well away from the main bird sites, or present only in small numbers between The Folly and Island Harbour.
- 8.6 At present the winter muddiness of the east bank footpath helps to limit visitor numbers and control the exposure of birds to disturbance. Conversely the raised, surfaced cycle way on the west bank becomes increasingly attractive in bad weather. A policy to continue to upgrade cycleway 23 and to leave the east bank footpath to a more naturally seasonal state is likely to beneficially maintain this situation.



River Medina

- 8.7 There is also a riverside footpath on the west bank between Riverside Park and West Medina Mills, this is an extremely muddy and some users (including the surveyor) reported it to be hazardous. During the scheduled surveys the team did not encounter a single user along this stretch of footpath. Any future plans to upgrade this path, although not without merit, should take into account the increased winter usage and subsequent bird disturbance that would result.
- 8.8 There were reports of conflict between walkers and cyclists on both banks of the Medina. If a more harmonious use of these stretches could be encouraged (i.e. increased cycle bell use) fewer walkers and their dogs would resort to off path deviations.
- 8.9 There is an aspiration to create an east Medina cycle way to mirror the west bank and so put in place a permanent surfaced route between Newport and East Cowes. This will complete a circular Medina estuary route via the floating bridge. As a project to develop the recreational value Newport, Cowes and East Cowes this scheme has great merit, it will be important though to carefully consider the likely results of increased visitor use along the open shoreline of the Folly Lake (mid-estuary) particularly where this route sits between the intertidal feeding areas and the adjacent high tide field roost areas.
- 8.10 There are precedents elsewhere (e.g. Farlington Marshes RSPB reserve and Hook Links on the Hamble) for the use of fences and ditches alongside paths to keep visitors and their dogs contained along sensitive routes and so restrict disturbance to a regular and predictable pattern which birds can accommodate. Alternatively the route selected for the east Medina greenway would move inland between Island Harbour and The Folly, though this would have land ownership implications. From The Folly to Whippingham and East Cowes the existing footpath diverts inland and is well shielded from the shoreline by intervening fields and copses.

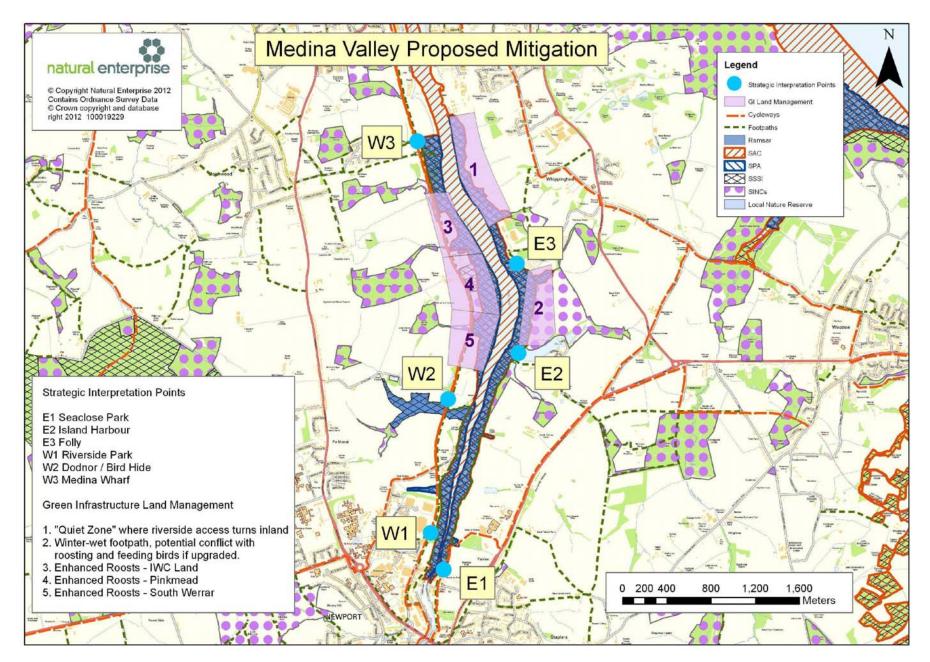


Figure 13 Map of Medina showing recommendations

- 8.11 There is some evidence of informal access between the new housing development at Whippingham and The Folly along the riverside from Kingston. This has the potential to become very damaging if allowed to establish. The East Medina greenway could help to tackle this by improving the access between East Cowes and The Folly, ensuring that it takes the least sensitive route it can, and blocking, with the help of landowners, the crossing points along the riverbank that are being gradually established as an alternative.
- 8.12 The Folly and Island Harbour are important allies in the control of recreational disturbance. Both remain open through the winter and both offer free parking and so are the main points of access for visitors. Both therefore provide useful locations for imaginative interpretation and public information (see figure 13), a message that encourages people to enjoy the walk between the two but explains the significance of the Medina for birds. By concentrating, through interpretation, the whole of the Medina's designated winter bird status into a 'bird reserve' that covers the estuary, shoreline and roost fields between The Folly and Island Harbour, by inviting all the users there to participate in its conservation, and in fact thanking them for having already done so by exercising care and responsibility, it is possible to build a sense of place here that centres on its wintering birds.

9 Further Work

- 9.1 Those interviewed for this study were in the main individual walkers and the recreational impact on which the recommendations are based is predominantly that created by walkers with dogs. It is known however that at both Medina and Ryde Sands there are groups and organizations providing occasional activities on or near to the European sites. These include the sailing centres along the Medina, and wind-surfing, kite-surfing and buggying clubs at Ryde. These hobby and commercial users should be given the opportunity to contribute to a more complete understanding of their recreational impacts and to contribute to the opportunities for mitigation at both study sites.
- 9.2 There are sufficient practical mitigation measures recommended for both the Medina and Ryde study sites that action plans might be prepared for both. These would bring together the organizations with site management authority and responsibility with other potential partners prepared to help develop a set of pilot projects.

10 Guidance for the design of future GI

10.1 The results of the study, and in particular the feedback obtained from those people interviewed, provides some useful insight into the character of well-used green infrastructure or perhaps, more accurately, popular parks and other public open spaces within a green infrastructure. If, by providing attractive alternatives to routine visits to more ecologically sensitive sites, new open space and GI can dilute concentrations of recreational impact and reduce the overall share of visitor pressure borne by the European conservation sites in particular, then the characteristics of such appealing new spaces should be carefully considered.

Car Parking

10.2 Free car parking as close as possible to the open space will help to ensure its popularity. A single purpose-built provision as close as possible to the park is likely to be most successful but smaller informal spaces distributed nearby can still prove effective.

Extent

10.3 GI should be designed and laid out in such a way that it provides in at least some part, an open and unobscured space, or a particular vista within it, that allows a visitor to let their dog off the lead should they wish to, perhaps for just a short time during a longer overall visit, but to keep it safely in sight for the whole of that time.

Dry routes

10.4 There should be a hard-surfaced path with sufficient width to safely accommodate walkers with their dogs as well as other users. This will provide safe and relatively clean access even in the wet conditions more likely to arise in winter. Paths should be accessible, and obvious, immediately from the car park.

Facilities

- 10.5 Locate the park near to existing cafés and/or toilets if possible.
- 10.6 Benches spaced along the main route will encourage visitors to spend longer at the site particularly if they can let their dog(s) exercise safely while they sit. The exact locations of benches is therefore a significant element of successful design.
- 10.7 Waymarking clear and easily followed orientation for the visitor.

Character

- 10.8 Both desk study and visitor survey suggest that successful green infrastructure includes open spaces with particular character, memorable or unusual features whether built or natural.
- 10.9 In the design of new GI it is important therefore to create a sense of identity, something that deliberately elevates the park above generic greenspace.
- 10.10 Examples of designed character include:
 - a. Varied landform: dips, ridges, banks; all features that can enhance an otherwise bland and uniform space, creating interest and increasing visit time.
 - b. Distinctive planting schemes such as blocks of colour, unusual structural elements, orchards, wetland and bog gardens.
 - c. Ponds, streams, fountains; almost any wetland or water feature will become a point of interest and a valuable tool in the task of attracting and retaining the visitor.
 - d. Single veteran trees retained from previous land use (e.g. farmland) and incorporated as key features, perhaps with distinctive seating beneath; again the intention is to create landmark character even within a relatively small space
 - e. Public sculpture and bespoke design. This might be in the form of an art installation, or it may be a commissioned entrance, or detailing on benches, or distinctive and unusual waymarking. All and any of these will lend a sense of place and character which will in turn encourage return visits and longer stays.
 - f. Excellent interpretation. This need not necessarily be an orthodox information panel, though these can work well, but it must be compelling in the way it describes the site and its setting, it must encourage exploration and a sense of discovery.
- 10.11 Above all the character of new GI should be based on simplicity. In the same way that the Medina is essentially a river bank and Ryde is a beach, new provision should pick a distinguishing characteristic, or enhance one that already exists, consistently and thoroughly without cluttering the visual amenity and visitor experience with too much variety and distraction.

11 Conclusion

- 11.1 Both the River Medina and Ryde Sands play a vital role as feeding and roosting stations for wintering birds. This study has revealed that though these sites are well used and loved by local residents, their conservation importance is not well understood by the majority that visit and therefore not considered significant. This is something that can be addressed and in doing so a new and constructive dialogue with the recreational users of sensitive conservation sites can be begun. The report recommends a combination of high quality interpretive material and high profile participative projects that both celebrate and instruct as the basis for ongoing mitigation work.
- 11.2 Users at both study sites are drawn to the particular local distinctiveness of each as much as to their generic Green Infrastructure suitability. Simply offering new or other nearby 'compensatory' GI space in the form of alternative local recreational capacity will not therefore be sufficient to draw users away from the sensitive sites. The report recommends a series of essential characteristics that should be considered in the creation of new GI and the enhancement of existing GI for ongoing mitigation work.

Appendix 1

Semi-structured Interview (Dog walkers example)

	Semi structured interview (DOB wanters example)	
Interview location (specific as possible):		v location (specific as possible):
	Tide:	
	Time:	
	Date:	
Weather:		;
1.	Define pattern of use:	
	a.	How often do you come?
	b.	Do you come here year round? (details)
	C.	How long do you stay?
	d.	What time of day do you normally visit?
	e.	What route do you normally take? (areas and interesting notes)
2.	Travelling	
	a.	What is your home postcode/street
	b.	How do you travel to this location?
3.	What are you main reasons for coming here? (open question)	
4.	Where do you go when the dog ban is in operation?	
5.	Winter alternatives	
	a.	What are your other favourite winter places for walking the dog?
	b.	What features do you like about this alternative place?
6.	What birds have you seen here?	
7.	Would you read a sign about the birds in this area?	
8.	(For Ryde) If an area of the sands at low tide was zoned for birds where disturbance by	
	users was kept to a minimum would it change how you used the beach?	
9.	Interviewer to note number of dogs if applicable.	