



*= West Bay Beach =*  
*A Biodiversity Perspective*

Marina Curran-Colthart,  
Local Biodiversity Officer,  
Argyll and Bute Council



# -West Bay Beach-



Coastal shingle is internationally rare and is an important and unique part of Scotland's nature.

- West Bay Beach- length 1000m approx., Esplanade 986m approx.
- Affords Dunoon and the surrounding area an amazing natural amenity with the ability to protect man-made features
- Upper reaches dominated by Shingle with a Sandy substrate
- Native Plants with some surprises colonise only part of the Beach at the southerly section.

## What's Special about West Bay Beach- visitor comments

*The hotel is in the West Bay, by a beach that has the best stones for skimming I have ever found, and we spent some time there before leaving Dunoon*



When we walked into town for dinner we saw a seal swimming close to the shore!

Very "coastal" feeling, when you hear the waves in the evening to your room. Would go back!

We even had a dip in the Clyde!!

With perfect access to the beach our dogs had a wonderful time too!

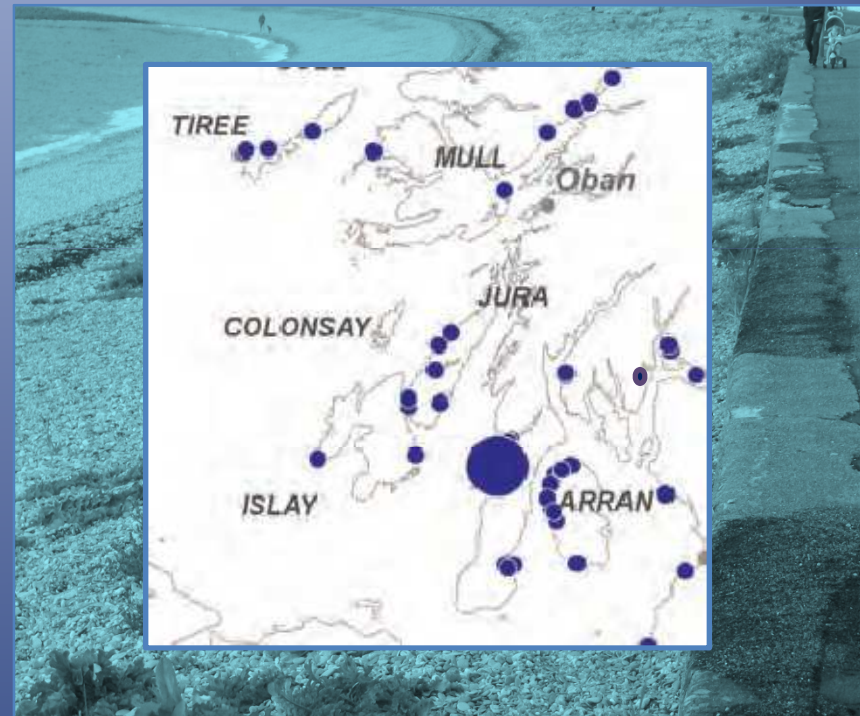
# Biodiversity- Shingle and Vegetative Habitat



## Shingle Beaches

- Shingle is defined as sediment with particle sizes in the range 2-200 mm. It is a globally restricted coastal sediment type with few occurrences outside north-west Europe, Japan and New Zealand.
- **Scotland has 1,100 ha**
- **Argyll And Bute-**
  - 50 beaches
  - 5.9 average ha;
  - 293.1- total ha

## Shingle Beaches in Argyll and Bute





# Habitat

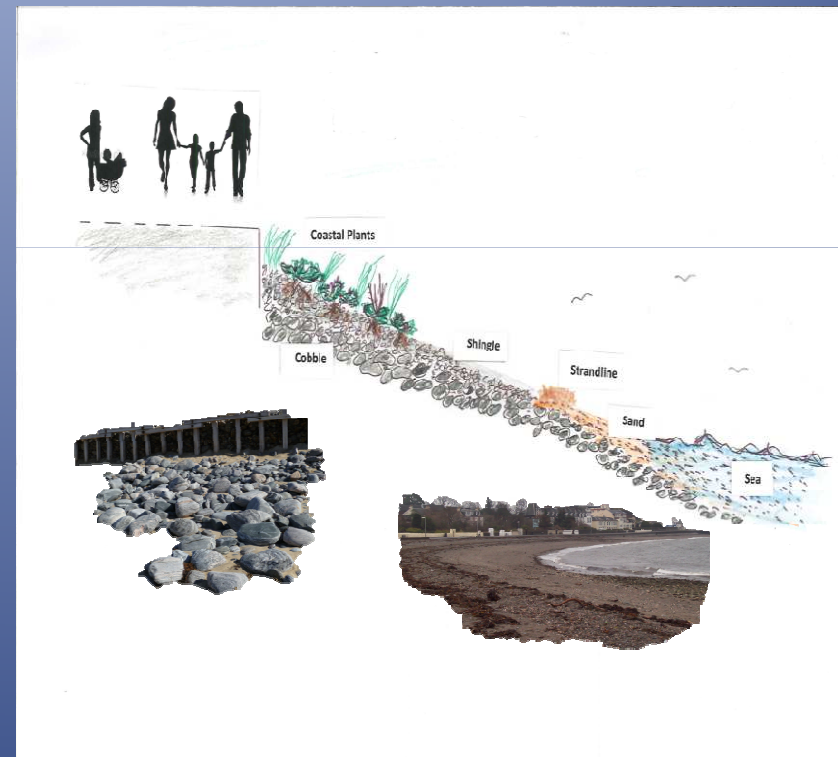


## Habitat

Coastal vegetated shingle is recognised under an EU habitat type 'Perennial vegetation of stony banks' and is a UK Biodiversity Action Plan

- West Bay beach supports some important vegetation for birds and bugs.
- Protects the coastline by forming a Natural barrier

## Coastal Shingle Structure



# Species.



## Plant Species found at West Bay

The main National Vegetation Classification (NVC) community associated with the Shingle beach at West Bay above High Tide Mark is:

- Mayweed –*Matricaria* (Tripleurospermum)-( white daisy like flower),
- Sticky Willie- *Galium aparine*,
- Sea Kale: *Crambe maritima*,
- Sea Pea: *Lathyrus japonicas*,
- Thrift: *Armeria maritima*,
- Docken- *Rumex sp.*,
- Fat hen- *Chenopodium album*,
- Marram Grass - *Ammophila arenaria*,  
Buttercup- *Ranunculus sp.* allied with some other grass species-i.e. Creeping Bent was noted.
- **Even tomatoes, potatoes and corn.**



# Animals



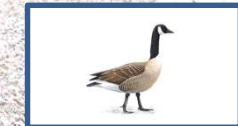
## Bugs

- Bug *Rhopalus rufus*
- Bug *Monosynamma maritima*
- Leafhopper *Aphrodes duffieldi*
- a Cuckoo bee *Nomada ferruginata*
- Brown banded carder bee (*Bombus humilis*)
- Large garden bumblebee (*Bombus ruderatus*)
- Shrill carder bee (*Bombus sylvarum*)
- Gilkicker weevil (*Pachytychius haematocephalus*)

## Some Birds and Mammals



- **Gull sp. Common, Herring, Black headed**
- **Oyster Catcher,**
- **Cormorant,**
- **Shag**
- **Turnstones**
- **Mallard,**
- **Canada Goose**
- **Swan**
- **Other Waders**
- **Otter seen**



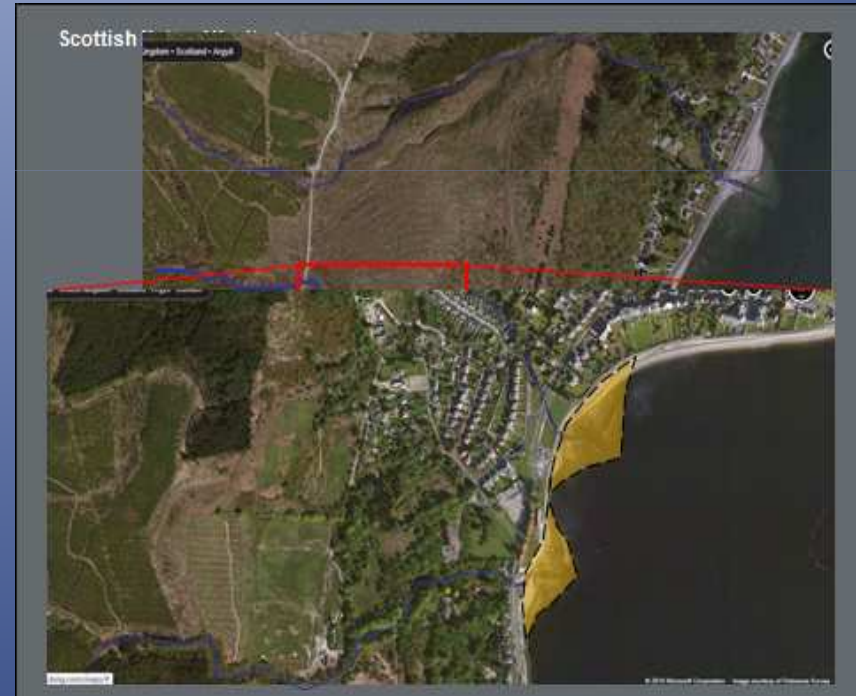
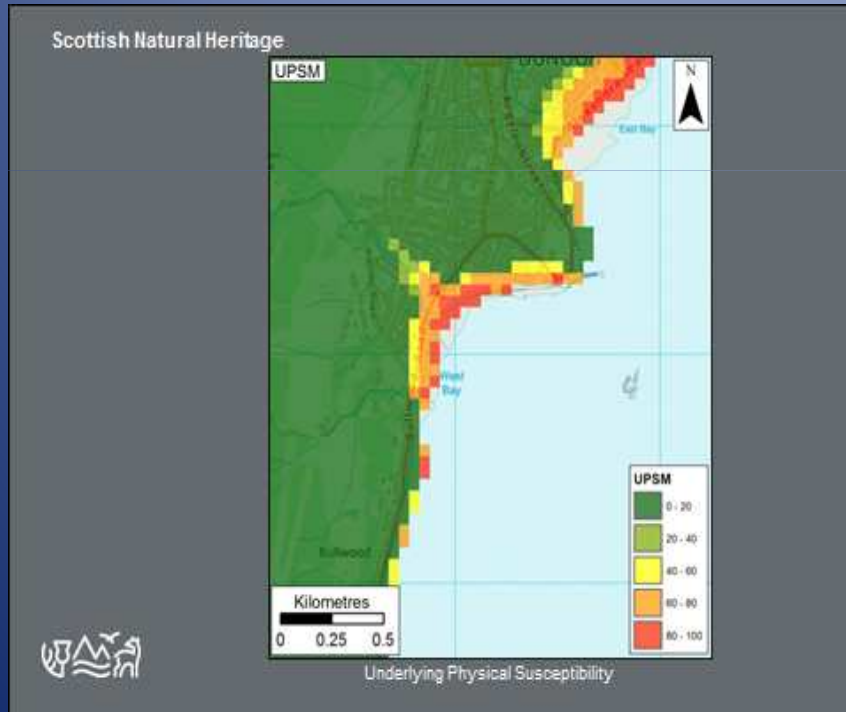
occasionally



# Drift Susceptibility

Model

Coastal drift.

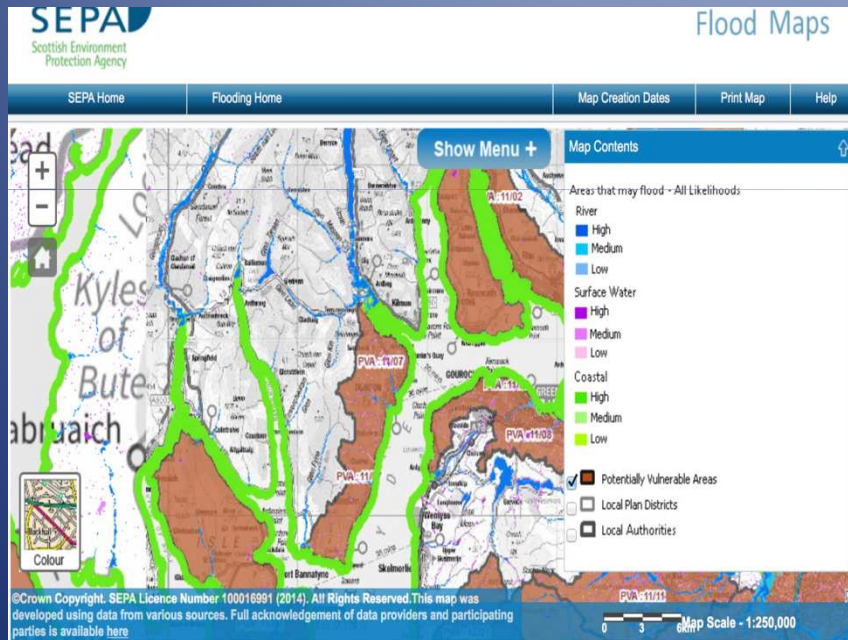




# Flood Risk

SEPA Map

Dec 2014



# Action Proposals



| Advisory  | Action   |
|---|--|
| 1. Shingle vegetation is hardy and the best management is often to do nothing.  | Survey and Monitor species diversity and extent within the beach. Cut seed heads of Docken at base, bag and remove off site. The leaf vegetation is the food for the Docken beetle.  |
| 2. Invasive species can have a huge impact on habitats and the flora within them, often changing the dynamic of the environment until the habitat is unrecognisable from its original form. | Survey and if found develop an eradication programme. Because of the substrate, I suggest cultural control-Pulling, bag and remove off site- consult SEPA on this. Other invasive's such as Tomato Plants, Potatoes, Corn and any other food species can be pulled and bagged without a licence. |
| 3. Monitor changes in substrate movement.   | Survey distribution of substrates, exposed cobble, shingle and sand.   |
| 4. Install an Interpretation Board  | Gather information on historical, biodiversity and images of species and beach profile.<br>Funding?  |
| 5. Education  | Develop a local schools project as part of the Sea and Learn Pack.   |

# Public awareness- Opportunity



Time to tell the story:

Interpretation opportunity.

THESE SANDS HAVE SEEN • LAVA FLOWING • SEA KALE GROWING • STRANGE BOATS FLYING • A TITMEN DYING • SWIMMERS PLAYING • YOUNG MEN GREYING • WHILE THE SEA FLOWS ON REBARDLESS

## BATAICHEAN ADHAR FLYING BOATS



A seaplane squadron was based here during World War Two and planes were landed up the slipway to Inverness and an engineering shed for repairs. Sandalwoods and Catalinas flew out over the Atlantic and the Baltic from here, to open and attack U-boats to protect convoys heading to USA and Russia. Many came to grief with much loss of life, including six Sandalwoods, one of which crashed near Lamsater Lighthouse. There was also a signal station and indicator lamp here to direct submarines in the channels between Olan, Mull and Lamsater.



This was a key area of operations for the Royal Air Force with other flying boat stations at Arklow Bay on Skye, a Coastal Command headquarters at Dingwall, Rossie on Olan and an airport at French Combs built in 1940. Dumboes built with wood and canvas were dropped on Olan as part of a defence exercise and hundreds of pigeons were parachuted on to Skye. Today seaplanes have returned to Olan Bay and the airport has been upgraded.

## SANDS OF TIME

### BY THE SEASIDE



This beach was popular with holiday makers for sunbathing and swimming until quite recently. The Pavilion Tea Rooms could row, row and rowl drinks and hold dances and other functions and there were beach huts for changing, storage and a refreshment stand along the shore. It was the first beach in Argyll to receive the prestigious King's Scottish Beautiful Seaside Award.

### BEACH BIODIVERSITY



The sands and rockpools provide an invaluable habitat for a variety of species of shellfish, crustaceans, birds, plants and insects. Crabs, watercress and molluscs are eaten, slugs and worms which emerge from their sand burrows with the incoming tide. Turtles of various ilk along the beach are also important for bees and other insects and for straggling sea birds.

Please help to keep the beautiful beach free of litter and dog dirt.

Argyll Bute Council, Inverness, Scotland. All rights reserved. © 2010. All rights reserved. All rights reserved. All rights reserved. All rights reserved.

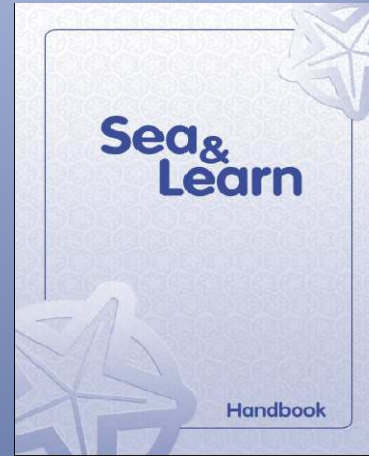


# Educational- opportunity.



## Schools project:

- Sea and Learn Pack
- Adopt a Beach
- Practical project-



Getting to know our beach, Structure, Zones, Plants and Animal.

Project area- establish Marram grass,

- Beach School run by the GRAB Trust.

# Policy Opportunity!



- Develop an Argyll and Bute Policy for Beach Management
- Strategy? A Generic management plan?

*For discussion.*



*'the best stones for skimming I have ever found,*

Thank you for your time and interest.

