



## How to do a Nurdle Hunt

Nurdles hunts are fun and taking part is easy. By joining in you are helping end plastic pellet pollution.

All you need to tell us is how many nurdles you find, where you found them, how long you were hunting and how many people took part.

### An overview:

- 1 Head to your chosen location
- 2 **Count and record number of nurdles**
- 3 Record the **number of people** hunting
- 4 Record **how long you were hunting** (minimum 10 minutes)
- 5 **Submit data** online

Note: We encourage you to submit your findings whether or not you found any nurdles. A nurdle hunt that found no nurdles is important information too!



Nurdle hunters, searching along the paths at the back of a sandy beach.  
Credit: Hawarden High School

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A well prepared nurdle hunter, with waterproof jacket, gloves and equipment.  
Credit: Melanie Pyne

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## Safety First

Heading to the beach is often a relaxing and easy day out. But don't ever underestimate the sea; waves, tides and currents can be strong, especially in stormy conditions. Follow these helpful tips to stay safe:

- Tell someone where you are going and when you plan to be back.
- Check the tide times so you don't get caught out or cut off from the beach exit.
- Wear sensible clothing. If it's cold, make sure you have warm clothes and waterproofs if needed. If warm, make sure you have sunscreen and appropriate clothing to protect you from the heat.
- Cold weather beach goers – maybe put a spare pair of clothes or a blanket in the car in case you get cold during your hunt.

**Remember:** taking part is voluntary and entirely at your own risk. We can't take responsibility for your safety, but we want to help you keep safe as possible and we'd love it if you took part, which is why we have put together this list. But remember it is not exhaustive.



## Step by step

### Before you start

1. Identify the back of the beach (away from the water)
2. Find the strandline (usually a line of seaweed and other debris left over from the last high tide). Stranded seaweed, wood and often plastic or other forms of marine litter will indicate the strandline.

Nurdles will often be in the most recent strandline and the back of the beach in the oldest strandline / caught by grass (see figure 1).

3. Scout out the section of beach you want to survey – You don't need to survey the whole beach. If your beach is really big, you may want to identify a stretch of the beach where you would like to survey.
4. Using your recording sheet ([download here](#)) fill in the bits of information you can:
  - Number of volunteers taking part
  - Start time / Date
  - Location

### Now you're ready

5. Get nurdle hunting - Walk the length of your chosen area looking for nurdles

Nurdles are very small and tricky to see so take your time and get close to the ground. Sometimes nurdles are nestled in grass at the back of the beach or covered by seaweed.

6. Use your recording sheet to tally the nurdles you find.  
If there are too many nurdles to count, please visually estimate the amount you have found. One way to do this is to count what you find in a 1m square and multiply that by the length of the patch of nurdles (pace out the length along the beach). Our maximum category to report is >1000 nurdles, although if you know you found many more than that, please include this in the 'any other information' box.

### Remember:

7. Take photos! Share your story on [Instagram](#), [Twitter](#) and/or our [Facebook page](#). See our [social media toolkit](#) for guidance.

**TAG US! @greatnurdler (on Instagram and Twitter!)**

### When finished:

8. Record the stop time
9. Record the number of nurdles found
10. **Wash your hands**



Fig 1. Graphic showing potential nurdle presence on a sandy beach.



Note: Please ensure you take suitable health and safety precautions during your beach clean. We recommend washing your hands thoroughly after handling any marine plastic debris, including plastic pellets / nurdles.

### Submitting your results

11. Submit your results!

When you have completed your nurdle hunt please submit your results to our website as soon as possible using the online form.

**DEADLINE: Please submit results before midnight on 25th March**

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## Collecting nurdles

You don't have to collect all the nurdles you find, the most important bit of information is the number of nurdles you think are present on the beach during your nurdle hunt!

Please remember that nurdles [adsorb toxic pollutants from the ocean](#). If you are collecting and removing nurdles, please make sure you use appropriate equipment or protective clothing. We recommend using gloves, sieves and / or tweezers to remove the nurdles, but insist that you wash your hands after touching nurdles or other marine litter when your survey is complete.

Do you need to organise uplift of the debris you collect? If removing large amounts of pellets or marine litter you may need to think about how you will take it away from the beach.



## Getting others involved in a Nurdle Hunt...

Some of you might be interested in setting up and organising a Nurdle Hunt for others to join in? If you think you can or want to, please feel free. Here are some helpful tips:

1. Choose a day, location and time - check our map to see where has or hasn't been surveyed yet.
2. Ensure that you are allowed to be there, can access the beach safely, and have checked the tide times! Try not to get your feet wet, after a high tide is the best time to search for nurdles.
3. **Complete a risk assessment.** Please remember, you are responsible for the event and the event's participants. You may even want to consider if you need to take out Public Liability Insurance.
4. Promote your event! Set up a Facebook event and share on social media. [Our social media guidance](#) might be helpful here.
5. Get any equipment you might need – our [helpful tips document](#) might be useful here
6. Before you head out; watch our [short 2 minute video](#) so you know what you need to do, and check the weather is still safe to do a Nurdle Hunt.
7. Download The Great Global Nurdle Hunt [recording form](#) to make sure you don't forget what information we need.
8. Get nurdle hunting!

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## More tips!

[Check out our video](#) for a clear idea of what you need to do.

### WHERE TO LOOK

#### Amongst other plastic:

The best place to start your hunt is amongst accumulations of small pieces of plastic above the tide line (this is the line of seaweed and other debris left by the last high tide).

#### Tide line:

The sea washes all sorts of marine debris up onto the shore. Nurdles are washed up with them onto the high tide mark where they get trapped in the strand line debris. (See figure 2)

#### Paths:

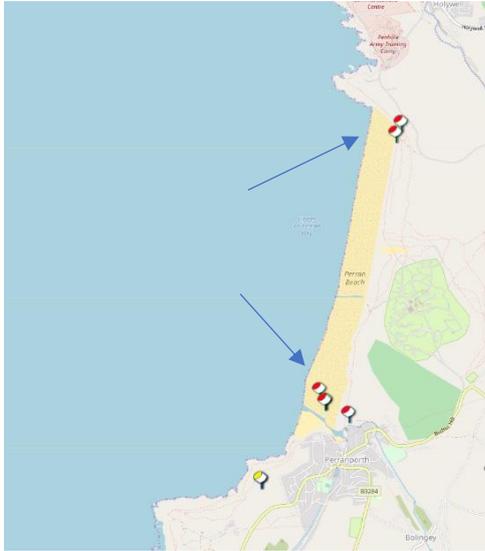
Look on sheltered tracks and paths at the edge of the beach. This is where nurdles could have been blown or swept to during very high tides or storms.

#### Vegetation:

Nurdles are very light and can be blown by strong winds onto the shore, from the sea. They often get caught in the base of the grasses and rocks at the top of the beach.



Fig 2. Nurdles in strandline (Image Credit: Jace Tunnell, Corpus Christi, Texas, USA.)



**Sandy Beach:**

It is easier to hunt on sandy rather than stony or pebbly beaches

**Headlands:**

Beach litter often accumulates near the headlands of bays or towards a corner of a bay. (See figure 3)

Fig. 3 Nurdles collecting at the edge of a bay or near the headland. Nurdle submissions shown on The Great Nurdle Hunt's [Nurdle Map](#).

**KNOW YOUR NURDLES**

Nurdles are hard to spot! They are very small and their colour often blends in with the sand or can be covered up by seaweed, shells and blades of grass. So, when on your hunt slow down and get close to the ground. Take your time.

**Colour:**

Nurdles can vary in colour from black to blue, yellow to white. Often pellets are clear or white but they become yellow over time, so keep your eyes peeled for all different types.

**Size and Shape:**

Between 2-5mm in diameter, often shaped like a lentil, these pesky pellets are small!



This image shows the variation in different types of nurdles.

Download our [Nurdle ID Chart](#) to help separate true nurdles from other beach debris!



**BIOBEADS**

You may also come across another type of pellet – these are called biobeads and are very similar to nurdles but are used by a different industry. They are also plastic but these beads, often black-grey and wrinkly or ridged in appearance, are used as an aeration aid in water treatment. Let us know if you find these pellets too!

Below are some photos which give you an idea of the different types you might find useful:



Image Credit: Jodie Harper, Crooklets Bay (Bude) Nov 2018



Image Credit: Dawn Thomas – Mixture of biobeads and nurdles



Image Credit: Yvonne Olsen – Nurdles, near Oslo

### EQUIPMENT LIST (suggested)

We've heard news of all sorts of methods to remove microplastics from sand, gravel and other beach debris. Below is a suggested equipment list and some examples of their use:

- Hand sanitizer – useful to use follow handling nurdles, before washing hands.
- Thin gloves (eg. Nitrile or latex gloves) – to protect your hands from excessive contact with marine debris
- Plastic or metal tweezers – to remove individual nurdles (if you decide to do so)
- Sieve – to separate nurdles from the sand
- Bucket / heavy duty bin bags – To collect nurdle finds and other marine debris.
- Old jam jar (to keep you nurdle finds in and spread the word of plastic pellet pollution)

**Note:** we realise that we have suggested a number of plastic items. If you already own alternative items, we don't recommend purchasing this for a single event. We would always recommend borrowing equipment where possible. However, if used multiple times and kept safely or disposed of correctly then they may be a useful purchase.





## METHODS OF REMOVAL

### Sieves:

Sieves of all shapes and sizes can be useful on a sandy beach.



A simple sieve works wonders  
(Image credit Vanessa Balci)



A mesh bin can be used for industrial scale removal  
(image courtesy of Rob Arnold)



Floating nurdles (left and right) plus a sinking yellow airgun pellet (right)

### Flotation:

Many (though not all) nurdles and microplastic will float in water, so a quick way to separate them from sand can be to simply put the collected nurdles, sand and debris in a bucket of water and scoop off the plastic fragments from the top placing them in another bucket.