# Flint & Tools

The people of Mesolithic Mountsandel, almost 10,000 years ago, would have sat around the fire making, or repairing, the tools they needed for hunting, building and preparing food. Many of these tools were made from flint.

### Lucky for Some

Mountsandel's ancient settlers had easy access to flint. The North Coast has many chalk cliffs in which large numbers of flint nodules (lumps) can be found. Such an abundance of flint was hard to come by, making Mountsandel an attractive spot for early settlers.

Flint nodules within the chalk cliffs at White Rocks Beach, Portrush. Image courtesy of Hearthside Heritage Resources.

#### Just the Thing

Flint has special properties which make it perfect for toolmaking. Through careful handling and great skill, flint can be 'worked' into a variety of different shapes and sizes. If struck correctly, flint will crack in just the right way to produce thin flakes and shards. Like broken glass, these flakes (or 'blades') are very sharp and so they are just the thing for making knives, scrapers, drills and other tools.

#### How to spot a flint tool

Stone Age flint tools are most commonly identified by archaeologists through simple observation. Below are some of the common features to look out for the next time you pick up a piece of flint.

Mesolithic Mountsandel

- serrated.
- produce blades. It looks like a tool!

Reconstructions demonstrate how flint microliths and blades may have been used to make tools and weapons such as arrows and axes. Image courtesy of Hearthside Heritage Resources.

These flint tools include blades and core axes from the Mesolithic period. Image courtesy of Causeway Coast and Glens Borough Council.

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Archaeology has shown that local Mesolithic communities used larger flint pieces to make tools like axes, picks and boring tools. These would have been used for felling trees, building and for crafting other objects. Knives and scrapers were also produced for use in food preparation and in processing furs and animal skins to make clothing and other items.

At Mesolithic Mountsandel, archaeologists discovered thousands of tiny flint blades, called 'microliths'. These small blades could be fixed to wooden handles or bases using tree resin, to make a wide variety of objects. Microlithic tools may have included graters or grinders to process food and drilling tools to help with building.

Flint nodules collected from White Rocks beach, Portrush.

Artist interpretations of Mesolithic food grinders fashioned from flint microliths secured to a wooden base. Images courtesy of JDC Marshall.

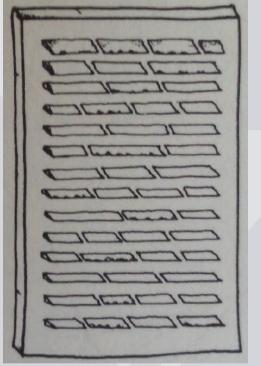
Evidence of pieces being carefully chipped away to form a blade/sharp edge. Sharp edges show evidence of being

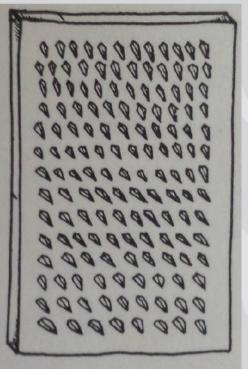
There is a slightly raised area on one side called a 'bulb of percussion'. Like a slight swelling (the flint equivalent of a bruise), this is evidence of flint being struck to

> A project supported by the European Union' PEACE IV Programme, managed by the EU Programme Body (SEUPB).

#### 10,000 year old toolbox

These flint blades are examples of microliths found in the North Coast. Images courtesy of Causeway Coast and Glens Borough Council.







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# Making a Meal

Nearly 10,000 years ago, the ancient community at Mountsandel would have found preparing a meal much more difficult than it is today. Ireland's earliest settlers did not grow crops, make bread or raise cattle. Hunting, fishing or finding food was the only way to survive. Beside the River Bann and close to the sea, Mountsandel provided easy access to a variety of foods and resources.

Mesolithic Mountsande/

#### Gathering

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Seeds and nuts would have been plentiful in the forests of the Bann Valley and could be stored for long, harsh winters. Fruits, berries and fungi would also have been collected, such as apples, raspberries, blackcurrants and wild mushrooms. Seaweed and sea kale may also have been scavenged from the nearby coastline when other foods were scarce.

#### Hunting

The wildlife at Mountsandel was a vital source of food for Mesolithic communities, while it also offered access to the furs and animal skins needed for insulation, clothing and construction. Mountsandel's ancient settlers would have used a variety of techniques to hunt. They would have fashioned weapons from flint and wood, crafting knives, spears and projectiles to quickly bring down prey and defend themselves in the case of attack. It is likely traps were used to catch smaller animals like hares, however, they would also have proved an effective method for hunting more dangerous prey. Traps would have allowed Mesolithic man to hunt larger animals, such as bears, while avoiding becoming dinner themselves!

Fishing was incredibly important to Ireland's first settlers and the River Bann was a vital resource. Salmon, eels, trout, seabass and other fish found in the river would have been enjoyed by Mountsandel's settlers at different times throughout the year. At the coast, shellfish would have been another possible source of food and an important supplement when other food sources were in short supply.

Various fishing methods would have ensured a good catch. Simple hand held baskets may have been used, acting like large sieves to trap fish, while nets would have been thrown out on the river and weighed down with stones. Small bone and flint fragments discovered at Mountsandel and the Cutts (a natural ford on the River Bann) were likely used to make specialised weapons for fishing. Fish spears or eel rakes would have used flint barbs to catch fish as they swam by.

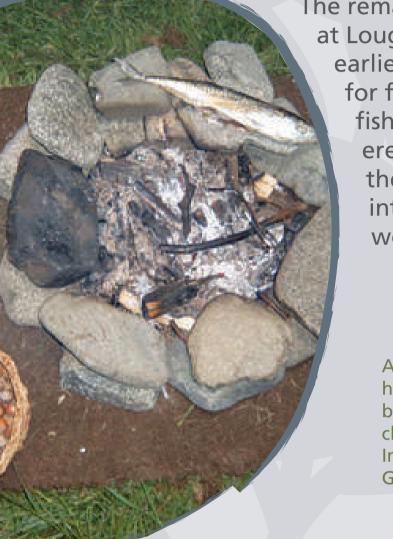
Salmon from the Cranagh fishery on the River Bann. Salmon remained an important resource for local communities into the 20th century. Image courtesy of Causeway Coast and Glens Borough Council.

Mountsandel and the River Bann. Image courtesy of Causeway Coast and Glens Borough Council.

This image shows a selection of foods which may have been eaten by communities at Mesolithic Mountsandel, including berries, nuts, fruit, wild mushrooms, boar and fish.

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The remains of a Mesolithic canoe found at Lough Neagh shows that Ireland's earliest settlers also constructed boats for fishing. Wooden fences, called fish weirs, may also have been erected in shallow waters to control the passage of fish, directing them into nets or areas where they would be easier to catch.

> Archaeologists discovered evidence of hazelnut shells, water lily seeds and boar bones at Mountsandel's Mesolithic site. close to the remains of ancient hearths. Image courtesy of Causeway Coast and Glens Borough Council.



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## Making a Home

Mountsandel is the earliest known settlement in Ireland, dating back nearly 10,000 years. Here a community was established, signalling the beginning of a long and rich heritage for the people of Coleraine and the North Coast. Archaeological evidence reveals that this community built huts to live in, made fires and even had workshop areas for the production of tools and other objects.

This archaeological evidence can also help tell us how Mesolithic huts were made. A framework of branches was woven or fastened together into an inverted (upside down) basket shape. This frame was then secured via post holes stuck firmly into the ground. This wooden structure would not have been sufficient to protect from the elements and would have been covered.

Mesolithic Mountsande/

#### Skins and Hides

Animal skins make a good waterproof layer for hut building. Deer and elk skins were used across Europe in the Mesolithic Era, however, there is no evidence that these animals lived in Mesolithic Ireland. Instead the skins of other larger mammals (like bears, wolves or boar) were likely used to cover huts. If skins were unavailable or difficult to come by other materials would have provided several viable alternatives.

### Thatch

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Dried grass, twigs and branches can be weaved and layered to produce a watertight and insulating hut covering. Thatch, now mostly made from straw, is still used to make roofs today.

Volunteers re-create Mountsandel's Mesolithic hut by weaving tree branches together, creating a foundation which would later be covered. Image courtesy of Causeway Coast and Glens Borough Council.

#### Bark

Long, wide strips of bark from large trees can be very useful for making houses. Bark provides protection from the rain and can be secured in a variety of ways. This layer could then be covered yet gain with branches, leaves or other materials to form a relatively dry and insulated shelter.

#### Moss and Turf

Moss and turf were readily available in Ireland and act as effective insulators. It is likely these materials were used in Mesolithic hut building, helping to provide vital warmth during harsh winters.

This reconstructed Mountsandel hut was made by local primary school children by placing layers of turf over inner supports made from woven tree branches. Image courtesy of Causeway Coast and Glens Borough Council.

This reconstruction of a Mesolithic hut uses furs to provide shelter. Image courtesy of Causeway Coast and Glens Borough Council.

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#### Hares

Hares can still be found in Ireland today and are capable of running at up to 35mph. Hares would have been an important resource for Ireland's Mesolithic communities, as a good source of both meat and fur.

## Wildlife of the Mesolithic North Coast

#### Seals

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Seals were another potential source of meat and fur and could be found along the North Coast or in the River Bann. If you pay attention while crossing Coleraine's bridges on foot, you might be lucky enough to see one yourself.

All images from the public domain.

#### Bears

Bears were one of the largest land mammals found in Ireland during the Mesolithic era and easily capable of causing significant harm if provoked. Nevertheless, bears were hunted by Mesolithic communities. Bone fragments at the Cutts area of the River Bann suggest that bear bones were used to make fine tools and implements; their fur would likely also have been used for clothing and hut building.

Mesolithic Mountsande/

#### Boars

The remains of wild boar were found by archaeologists at Mountsandel's Mesolithic site. Boar would have been an incredibly valuable source of meat and animal skins for Mesolithic communities.

#### Pigeons

Long used as a source of food, from the Mesolithic period to the modern era, pigeons remain a common sight in Coleraine.

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#### Wolves

Wolves would have been a common feature of Mesolithic Ireland. They would have represented potential prey for hunting (a good source of meat and fur) but may also have been semidomesticised as pets or trained to help hunt other prey, such as boars or bears.





