Bird Island

Our story occurs on a smallish island just off the east coast of Scotland which we shall call Bird Island. When it is not too wet and windy or hidden by sea haar (a fog of tiny water droplets), Bird Island¹ can be easily seen from the mainland.

From ancient times Bird Island has attracted annual summer visitors, nesting seabirds who travel from afar to the safety of the island free of foxes, wolves, cats, rats and hedgehogs, a place where they can raise their chicks in safety with an abundant supply of fish in the sea which surrounds it.

Over millennia, their rich guano (bird poo) has created a thick layer of fertile earth where grass, weeds and wildflowers abound, making an ideal home for insects, spiders and other creepy-crawlies.

Long after the death of the Dinosaurs and well before the Era of Humankind, birds and flying insects filled the air, flitting hither and thither looking for food, busily catching and eating other flying and crawling insects.

As one animal preys on another, they become part of Nature's Food Chain, an endless hunt that often goes on both day and night, without mercy.

Spiders

Among these creatures are spiders (from the class Arachnida) distinguished by having eight legs, not six, like insects, (from the class Insecta).

Spiders vary in size from very large to very small. Most spiders are predators hunting insects and, sometimes, other spiders. Some are fast, active and aggressive while others are slower and patient, prepared to wait, using webs to trap their food. Some have lethal bites while others use their venom to paralyse their prey before eating it alive. Others drop from above on a single web cord to grab and bind their victim then take their time to eat them. A large catch can feed a small spider for weeks, sometimes months.

Most spiders have good three-dimensional brains. This helps them to spin webs to trap food. Some webs are sticky while others must be woven together. Some spiders produce several types of web cords. Often they will anchor themselves to the ground with a web cord to enable them to 'fly' by launching themselves from high places, abseiling down to

¹ In modern times, men call it the Isle of May which is located about 9 kilometres (nearly 6 miles) from Cellardyke, a fishing village on the rocky coast of the East Nuek of Fife.

reach food or safety. Quite often a spider will climb back up along this cord reclaiming and storing it for re-use, if it is undamaged.

These web cords are very sensitive and spiders can use them to feel the very smallest vibrations should a potential prey insect or other spider touch it.

Some spiders are very cunning and might even cooperate with other spiders in their own 'clan' to fight off enemies. To do this, they use their own vibration language, tapping out messages to each other through a system of web cords which can extend for many kilometres joined at web nodes where each spider or group of spiders can listen in and answer back when required.

Resident Bird Species

Apart from visiting seabirds which come in Spring and leave in Autumn, there are other birds who remain all year, even during Winter. These birds mainly eat insects, spiders and other creepy-crawlies such as worms, slugs and snails.

These include Blackbirds, Robins, Wrens and Starlings and, most cunning of all, the members of the Crow family, including Jackdaws and Magpies. The Rock Pipet, a dark brown bird about the size of a Starling loves to eat spiders. The Rock Pipet is completely fearless, scaling craggy cliff faces looking for spiders, particularly in Winter when other food is scarce.

Our story begins.

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Clan Deft and Clan Brag

On Bird Island, the tiniest of the spiders call themselves The Deft.

These spiders live in nooks and crannies in the cliff faces. Their favourite food is a tiny sea mite, a shrimp like creature that slithers on its side on damp rocky surfaces eating algae and microscopic bits of wind-blown seaweed thrown high up onto the rocks.

Unfortunately for the tiny Deft, this odd diet makes them very tasty and much sought after by Rock Pipets and other spiders, particularly a huge spider called The Brag.

For this reason, The Deft are mainly nocturnal but fortunately have excellent eyesight and a highly tuned sense of smell which they use to find their food and to detect approaching enemies.

The Brag live mainly on the flattish upper surface of Bird Island, in the tussocks of grass where they roam and hide, waiting to spring out and grab their prey. The Brag are huge, almost as big as the tiny Wrens who love to eat them. The Brag defend themselves with a vicious bite and are much feared by all the other insects and spiders.

As Winter approaches and food becomes scarce, the females of Clan Brag start to eat the smaller males, making them cannibals. The females always carry their eggs with them in a tough grey sac attached to their body.

During late Autumn and into Winter, most of the insects and other spiders find safe places to hibernate. However, The Brag do not hibernate, remaining active all year round. Because they have very small weak eyes, they are compelled to hunt only by day, hiding deep inside their tussocks at night, waiting for the sun to return at dawn.

Dawn is the time of greatest danger for the tiny Deft as the hungry Brag descend the cliff faces abseiling on long strands of web, searching for the sweet and tasty Deft.

Fortunately for The Deft, the gales and rainstorms which lash the cliffs during Winter often sweep the Brag out to sea and certain death. But on calm, clear days, thousands of huge Brag spiders dangle on their web cords searching for the tiny defenceless Deft, probing into the cracks to winkle them out and gobble them down, with a single Brag eating thousands of Deft every day.

Horis, Moris and Doris.

Horis, Chief of The Clan Deft, lives in the safety of the Leader's Cave located high above the waves. From this cave he can access the outside world through a long, pinhole tunnel which leads to a thin platform jutting out over the strong currents which flow past Bird Island.

From his vantage point Horis can see the entire Eastcliff in both directions, witnessing the devastation caused by The Brag as they annihilate his clan.

Something must be done.

Were this situation to continue, The Deft will be wiped out.

Drastic action is required.

Using The Deft network of invisible but immensely strong web cords which connect the thousands of colonies of The Deft on Bird Island, the wise old leader has organised a web cord meeting in which every Deft spider could hear him speaking, using his front legs to pluck out his message.

From his Leader's cave, at midnight, when he knew every member would be tuning in, Horis issued this web statement:

"My dear Deft peoples, most reluctantly I have come to the painful decision that we must flee our home. My friend Moris from Westcliff has discovered a large tree trunk wedged in a cleft of rock. This could be our means of escape. When the next high tide comes, I propose we all clamber aboard and set out on an adventure to find a new and safer life, free of the tyranny of The Brag hordes. Before you reject this plan, please remember that The Deft have a long history of seafaring adventures. Sadly, we simply must leave our beautiful home here on Bird Island. If we stay we shall surely be eaten out of existence by our mortal enemy, The Clan Brag."

This transmission was followed by silence, while the members of Clan Deft considered what Horis had said.

Eventually he asked:

"Does anyone have any questions or suggestions?"

Doris, one of the boldest of The Deft mothers with an ambition to one day become leader in place of Horis, tapped out her reply:

"Horis and Moris, I think it is cowardly to flee from The Brag. Why should we give in to their tyranny? And think of our eggs, they would never survive a sea journey. I for one will never abandon my eggs."

"But what else can we do?", tapped out Moris from his small cave on the Westcliff.

Doris replied:

"Listen please everyone, I have an alternative plan. As we know The Brag are big and strong and fast but they are not clever like us. They lack clear leadership and their eyesight is poor. I suggest we use our cunning to fool them."

Horis responded:

"Do you have a particular plan, my dear Doris?

"Yes, listen carefully. Everyone has a part to play."

Having listened to Doris's bold plan, Horis made his decision:

"Yes, my dear Deft peoples, let us do as Doris says. Go at once and prepare yourselves to play your parts. Work ceaselessly and report back to me on your web cords when you are ready.

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It took many days of hard work and detailed planning but eventually the fine mesh net of strong but invisible web cords was spun and fixed in place on the Eastcliff of Bird Island near to the platform where Horis would stand to direct operations.

From his vantage point, the tiny Leader had an excellent view of the cliff edge directly above the web mesh net where Doris and her team of thrummers waited beside the Zinging Line, a strong, thick line made by twisting together thousands of individual web cords.

When everything was ready as Doris had instructed, The Deft waited patiently for the right weather day, hiding in nooks and crannies all along the cliff edge, resisting the daily attacks by The Brag.

After several wet and windy days, a calm moonless night brought a steady breeze from the West where The Brag were nesting overnight in their grassy tussocks.

Doris signalled to Horis that her team was ready to implement her plan.

In reply he said:

"Doris, go ahead on your own initiative. Make us proud!"

At the first glow of dawn, Doris and her thrumming team began to beat on the Zinging Line, keeping strict time and making the line vibrate with a high frequency:

Zing-a-Zing-a-Zing-a-Zing

In response The Brag, started running towards the source of the sound, heading directly for the vertical edge of Eastcliff, screeching loudly:

Zong-a-Zong-a-Zong-a-Zong

As they neared the edge, blinded by the strong low Sun shining into their tiny eyes, The Brag ran faster and faster. The wind from the West was behind them and blowing more strongly.

In their haste, The Brag forgot to attach their abseiling web cords and without safety lines they sailed right over the cliff edge, falling head over heels into The Defts' invisible web mesh trap.

As more and more Brag spiders filled the mesh trap, their weight caused the neck of the trap to close. When every Brag attacker had been ensnared, Doris and her team tugged on the control line sealing the neck of the mesh net, trapping the entire Clan Brag inside.

From his cave, Horis transmitted his order over the web cord communications line and Doris and her team cut the hundreds of anchor lines attaching the mesh net to the cliff face.

The invisible mesh net filled with The Brag tumbled and bumped down the cliff face and splashed into the sea. Strong currents carried the mesh net out from the shore where it disappeared under choppy waves taking the entire Clan Brag to their watery grave.

The Doris's thrummers began to beat again on the Zinging Line, this time sending out a tuneful signal of celebration:

Zing-a-Zong-a-Zing-a-Zing-a-Zong

Old Horis was dancing and jumping and ZING-a-ZONG-ing with everyone else when a Rock Pippet swooped down onto his platform ledge and swallowed him whole.

At midnight in the Leader's Cave, by popular acclaim, Doris was installed as the new Leader of Clan Deft.

Outside, as the Winter winds and rains lashed Bird Island, the resident birds snuggled into the shelter of their roosting places wondering where all the bigger spiders had gone.

Still, there were always other insects, creepy-crawlies, worms, slugs and snails to feed upon. And, if they could be found, the juicy little spiders living in the nooks and crannies of the steep cliffs.

Horis, Moris and Doris					