EYES AND NO EYES BOOK 8.

O'ER MOOR AND FEN

R. CADWALLADER SMITH

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Eyes and No Eyes

Book. 8

O'er Moor and Fen

BY

R. Cadwallader Smith

PUBLISHER'S NOTE

We at Living Book Press are extremely proud to bring you this release of Eyes and No Eyes, originally published by Cassell.

Some of the old images were not of a high enough quality to reprint so we have included many high quality photographs to accompany the text throughout.

Because this book represents a broad overview of the nature we will find around us the images may sometimes be of similar creatures and plants that are native to other regions than the United Kingdom where the story was first set. This is to help children appreciate that many animal families share similar traits and can be found in many parts of the world, some may even be in their own backyard, as well as provide an opportunity for those who can't access the great outdoors to see nature up close.

We hope these new editions bring a lot of joy to your homes, and that they will help children everywhere take a deeper look at the natural world surrounding them.

Living Book Press.
2025.

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MOORLANDS WITH HEATHER (LEFT) LICHEN ON ROCKS

LESSON I

THE HEATHER HILLS

"...those wastes of heath
Stretching for miles to lure the bee,
Where the wild bird, on pinions strong,
Wheels round, and pours his piping song,
And timid creatures wander free."

-M. Howitt.

In some parts of our land are great open tracts of moorland where, for mile after mile, one may wander over a rough carpet of heather or ling. Moors such as those, and immense forests, once covered the larger part of Great Britain. Then came a time when the forests were felled. Fields, roads, villages, and towns gradually took their place; for, where the trees grew, was soil suitable for cultivation.

But the moorland has no such soil. At great trouble and expense some of it has been made fit for crops, and the wet parts drained and planted. Much still remains,

A HIGHLAND BOG

however, the happy home of the lovely heather, and of the free moorland dwellers whose ways we will study later on.

Scrape the soil on some of our moors, and at once you feel the hard, solid rock. Here and there, indeed, it shows through, and nothing can grow but a few tufts of that strange plant called *lichen*. Swept by the keen wind, and having but a thin, dry soil, the rocky uplands offer no home for plants. On the lower parts we find a deeper soil; but this, too, is loose and peaty, and so *porous* that it is always thirsty. Here the springy heather is happy enough, and quite at home; like the Arab tribes of the desert, it knows how to squeeze a living where others would perish.

The word *moor*, however, really has nothing to do with dryness; it is of the same origin as our words *marsh*, *morass*, and *mire*. And many a moor will remind you, before you have gone far, that the name is well given. The dry heathland suddenly changes. Green beds of moss appear, amid rushes and tussocks of coarse grass; and then, unless you take heed, your feet sink into black mire!

In such places the surface is like a wet sponge, even

under the summer sun. And after winter rains the deep, slimy bog is dangerous. "But," you may ask, "why doesn't the water sink and drain away?" The reason is that there is a hard, tight mass down below, that neither moisture nor plant roots can enter. This dense mass, or layer, is not always of rock or clay, as we might expect. It is often formed of iron and sand, pressed together in a solid bed.

In the course of time all the iron in this light, moorland soil sings; it meets a denser layer, and there it rests. Then the soil above it fills with water, and remains full. A bog is formed, and that part of the moor will grow bog-plants of many kinds, but nothing else.

If plants could speak, I think those of the wild moorlands would have much to say. Theirs is a hard life. They are like those hardy pioneers who succeed in living in wildernesses, where less hardy men die. There is no protection on the open moor; no shelter from the scorching summer sun nor the fierce, bleak winter wind. And the soil has no store of food for the roots.

HEATHER

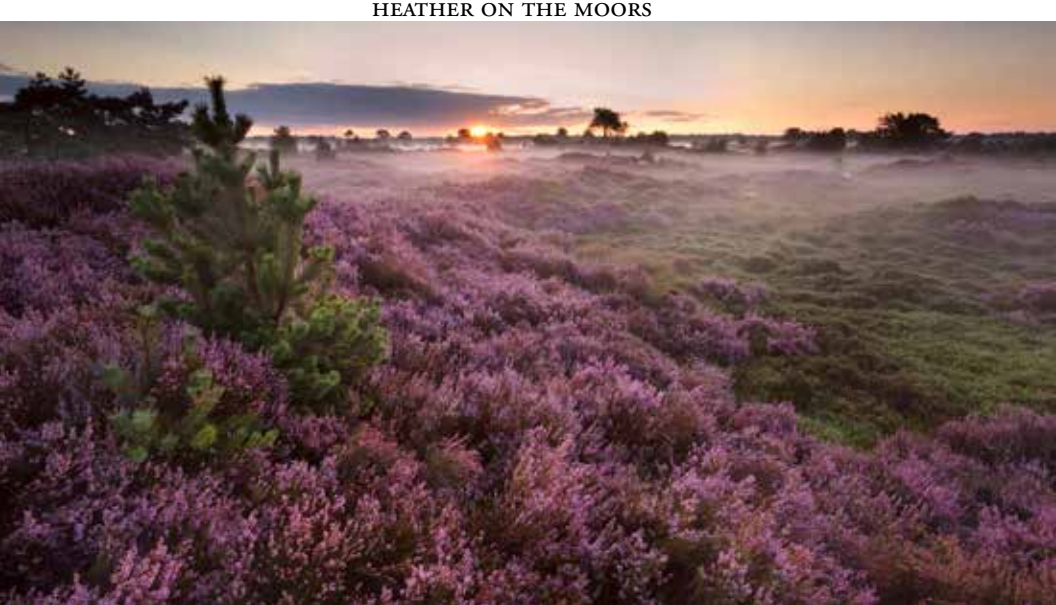
Look at the common Heather (or, as many call it, Ling), with its tiny leaves. They have no stalks, and we notice that their edges are tightly rolled back. The leaves are crowded together, and the whole plant is tough and wiry. We might compare it with a poor man, living as best he can; he cannot afford luxuries, and the Heather cannot afford the soft, wide, juicy leaves and stalks of the plants of the rich meadows.

The Heather must spread as little surface as it can to the sun's rays and the bleak, drying winds of the open moor. It shrinks from them, as it were; and the whole plant plainly shows us those dodges by which moorland dwellers "make the best of a bad job."

In late summer, moors and hill-sides are painted a lovely pinkish-purple with the Heather flowers. Near the end of each woody stem is a spike of little bells. Outside each bell is a *calyx*, or covering, of four purplish parts, known as *sepals*. They are crisp, like tissue paper.

Everyone knows the delightful smell of these pretty

HEATHER ON THE MOORS



bells, filling the warm summer air with fragrance. It attracts the bees from far and wide, to sip nectar from the delicate cups. They make it into honey, rich and thick, with a flavour of its own. On a day of sunshine the drowsy hum of the busy insects fills the air; looking up, you may see a constant stream of them as they come for more spoils, or fly back by the shortest air-path to their hives, laden with treasure.

There is no sight more beautiful than the purple moors where, for mile after mile, the Heather holds sway. It seems to love best a light soil of peat over sand, where its roots are thickly matted. You wade knee-deep in its wiry stems, which make a safe hiding-place for bird and beast. Even after the seed is shed the flowers still cling; they remain through the autumn and into the winter.

Growing with the Heather or Ling, and almost as common in some parts, is another kind known as the Fine-leaved Heath or Bell Heather, a bushy plant with very tough stems and narrow leaves. Its clusters of flowers arc a gay crimson-purple.

Coming to a damper part of the moor, we find the beautiful Cross-leaved Heath. It sometimes grows among patches of tall Heather, but prefers a moister home as a rule. You may gather a fine bunch of this heath before the Heather's purple spikes are at their best. Its flowers grow in a cluster of pale, wax-like, pink bells, all facing in the same direction. You notice that at the mouth of each bell are four pointed teeth, and hidden inside is a ring of yellow *stamens*. The leaves grow in fours on the stem

and are placed cross-wise—hence the name Cross-leaved Heath; they are small and pointed, with an edging of hairs.

Though the heathers and heaths own most of the moorland, there are many other plants to be found. The most interesting ones live in boggy ground, but we shall look at those in another lesson. Gorse, furze, or whin, and the lovely broom grow here and there. On the hillsides are great olive-green patches of the Whortleberry or Bilberry. Its pretty, luscious berries attract grouse, blackgame, and many another bird. On northern moors the black Crowberry offers another important harvest for the moorland dwellers.

EXERCISES

1. Mention five common plants of the moor.
2. What causes the bogs on some of our moors?
3. Describe the Cross-leaved Heath.
4. Mention some differences between moorland plants and those of the rich meadows.

CROWBERRY

VIPER

LESSON II

A RAMBLE ON THE MOOR

THE Moorland on a lovely summer morning is gay with small butterflies, and the hum of bees and shrilling of grasshoppers fill the air. As we wander over the heather we must keep a sharp look-out for the other Moorland dwellers. We shall see and hear many birds, but those we must discuss in other lessons.

Crossing a dry, sunny patch of sand between the jungles of heather, we detect a quick movement. We soon trace it, and find a lizard trying to hide in the tangle. We disturbed him as he watched in the sunshine for the insects and spiders on which he preys.

Nature has given the lizard such keen senses that he is as sharp as a needle. He disappears like magic—as if the fairies had granted him the wonderful "cloak of invisibility." Perhaps he needs all his skill! He seems to have few

LIZARD

enemies, but the two most to be feared are the Viper and Grass Snake. These are so patient, so quick and deadly that the lizard must be nimble to escape them! He darts at once into the heather tangle, but even there he is never safe from them. His life depends on speed and alertness.

One other protection the lizard has, and that a very odd one indeed! As he is mostly tail, his enemies are apt to seize that part! Then a strange thing happens! Off comes the tip of the tail, and while the enemy is busy "killing" the still wriggling portion, the lizard is hidden away in safety! The loss of the tail is nothing to him, for he soon grows a new one.

Like all other reptiles, the female of this common lizard of our moors has largish eggs, but she does not lay them until they are just about to hatch! She then, in the most cold-blooded way, leaves her little black babies wriggling on the ground!

The Viper or Adder is quite common on many heathlands. Its shining coils, with their dark markings, are not always easily seen; they mingle with the lights and shades of the tangled heather and bracken, where this poisonous snake basks in the noonday sunshine. It finds an easy living here, preying on mice and lizards, and, in the spring,

on eggs and young birds.

Down in the marshy part of the moor, it seeks poor Froggie as a welcome change of food. Here, too, is the Grass Snake, on the same quest. This snake, of course, is quite harmless. The yellow and black markings which look like a ring or collar round its neck, and also its *plain*, greenish back, help us to distinguish it from the venomous Adder. The latter has no collar, and a distinct black zigzag marking down the middle of its back. But it is as well for boys and girls not to go too near *any* kind of snake.

Coming to a sandy, bare part of the moor, we find it to be riddled with rabbit burrows. To see the *warren* at its best we must hide near by, at dusk; then the bunnies, old and young, venture out for their evening meal and a romp. How they skip and jump, and run merry races! But they know to an inch how far to venture; at the least alarm there is a scamper of brown bodies, with little white *scut* (tails) bobbing up and down!

Where Bunny has his home, we may be sure his enemies, the Fox and Stoat, are not far away. If the Moor is one preserved for the Grouse, these hunters are in their turn hunted by the keepers. All birds and beasts that might harm the precious Grouse, or their eggs, are "vermin." So Mr. Keeper, with gun, dog, ferret, trap, and poison, sets out to lessen their numbers. In some quiet corner you may find their dead bodies, where he has hung them up in a dismal row.

In olden days Red Deer roamed in large herds over the moorlands of England and Scotland. You know from your

history book how the Norman kings and nobles, loving the sport of hunting, made strict laws to protect the deer. The New Forest was one of the great spaces where these laws were very severely enforced. The Red Deer still finds a home in some English parks, and on West of England moors; but in a really wild state it is only to be seen in the deer "forests" of the Highlands of Scotland. There they roam in numbers in the lovely glens and over the rugged hill-sides. They are hardy and strong, and only when the deep snows of the northern winter cover their grazing grounds do they travel to the lower valleys.

The picture below shows the *hind* and her *calf*. Early in June her precious baby is born; she conceals it with care in the heather or bracken and there leaves it, visiting it only at dawn and late in the evening. As soon as its legs gain strength it follows her about, and keeps close to her for more than a year. So at times you may see the hind with a twelve-months-old baby trotting by her side, and close behind it a much smaller one, a baby of but a few weeks!

The male deer, or *stag*, has nothing to do with this

RED DEER HIND AND CALF

STAG AND HIND

family party. He feeds with other stags, big and little. But in the autumn a great change comes over them, and then begins a warfare lasting over three weeks. We shall be wise to avoid the moor or park at that time, for the stag is then ready to wound anyone and everyone. He seems bent on doing battle; and, if a rival stag beats him in the fight, he is eager to be revenged on a smaller stag, or on the passer-by!

The night air resounds with loud, fierce roaring, mingled with the clash of *antlers* as the stags meet in battle. An old stag bellows out his war-call, daring every other one in hearing to come and "fight it out." The young stags retreat in fear, knowing that they cannot stand against the weight and thrust of the warrior. But an older one throws back his great head and sends forth a roar of defiance as he trots towards his rival.

Nearer and nearer come the two angry stags until they are side by side. Then suddenly they turn head to head, their huge antlers meeting with a loud clash! They push and charge and strain with every muscle, first one and then the other being forced to his knees, for neither will give

way while his strength lasts. But at length one is thrown on his side, and runs away for his life! The winner of the fight roars again and again in triumph, and then the timid hinds gather to the side of the victor, who has proved that he is indeed the Monarch of the Glen.

Strange to say, those great antlers of the fighting stags *are shed every year*. In March or April they drop off, and the once proud stag feels proud no longer. He takes himself off to lonely places. And soon his new antlers begin to show, looking like two soft, smooth knobs on his head.

Inch by inch the knobs grow and take the shape of branching antlers. At first they are covered with "velvet"—a smooth skin, which the stags at length rub off against the heather. The age of the stag may be told by the size and shape of his antlers. For two years they are straight, but in the third year they have a single pointed branch, or *tine*, as it is termed. Each year, until the stag is seven years old, sees one more point, or tine, added. He is then in his prime, and is known as a "royal stag," or a "stag of twelve"—that is to say, with six points or tines adorning each noble antler.

EXERCISES

1. What are the chief enemies of the Lizard, and how does he escape them?
2. How can you distinguish the Grass Snake from the Viper?
3. Name four animals to be found on the Moors.
4. Describe how the Deer fight. What is the meaning of:—*stag, hind, tine, royal stag*?

BUZZARD

LESSON III

WINGED HUNTERS

HIGH over the rugged moor sails a big bird with rounded wings and widespread tail. This bird, the Buzzard, climbs the air with scarce a flap of its great wings. Higher and higher it circles until it looks a mere speck against the blue of the sky. One can never tire of watching its wonderful power of *soaring* in the air. Its mournful call—*See-i-oo, See-i-oo*— sounds faintly over the moor.

Suddenly it drops with half-closed wings at a great pace. Then once more it sails upward and over the hills, and at last settles on a rock amid the heather. If you can get near enough, you see a large bird, brownish in colour, with white streaks on its head. Its legs are stout and strong, its beak short, and—like those of other hawks—curved.

Perhaps you will have the good luck to see the great Buzzard catch its dinner. It rises a short distance into the air, and flies along scanning the ground. Most small

BUZZARD LOOKING FOR PREY

creatures take shelter as they see the big shadow coming towards them. But Mr. Mole sees nothing, for he is busy digging a tunnel through a nice soft patch of earth which contains grubs and worms. His digging brings him close to the surface—too close! A sudden swoop, and the Buzzard grips him in strong talons, having seen the slight heaving of the earth with its keen eyes.

Sometimes a young rabbit is served in the same way, or a mouse, or small bird. Even a frog, a beetle, or the dead body of an animal is on the dinner-list of this great bird. For the Buzzard, though a member of the noble family of Falcons, is neither fierce nor noble! It does little harm, and a certain amount of good; but it is shot, as a rule, for crimes it does not commit. There are still thoughtless men who will shoot at a bird because it is an uncommon one, or because they love killing harmless creatures.

I was once watching two Buzzards circling over some high cliffs, when a Jackdaw flew up in a rage, scolding the big birds. To my surprise they at once flew away, leaving the little Jackdaw in possession of the cliffs! Even the Magpie, a bird weak on the wing, can put the Buzzard to flight. It has none of the fierce fighting spirit of its tribe.

Rocky moorland near the sea-coast is the best place to watch the Buzzards. At one time they were quite common. They are shot and trapped, and their eggs taken, so it is little wonder that they are much rarer nowadays.

Let us climb the hills, and look for their nursery. Like most birds-of-prey they do not take great pains over their house-building. A big mass of sticks and branches piled together in a tree, or on a rocky ledge, is all they need. The outside of the nest looks very rough, but we notice that it is lined with leaves, hay, and soft down. Along the rim are some fresh green leaves, and we wonder why the Buzzards trim their nests in this way. The three large eggs are whitish with splashes of brown.

For five weeks the old birds take turns in sitting. Then at last a greyish, downy little Buzzard appears, then another; and a few days later the third is hatched, and the family is complete. Why do the babies appear one after the other? The reason is that three or four days went by between the laying of each egg, but Mrs. Buzzard began to sit as soon as the first one was laid!

A HAWK FEEDING ITS YOUNG

For some days the female Buzzard will not leave her family; then she spreads her great wings, and helps her mate to satisfy their hunger. The first-born youngster is a bully. Being the eldest, he is also the strongest, and, sad to say, "little birds in their nests" do *not* always agree! So, when mother brings home some choice beetles, a lizard, a mole, or a baby rabbit or bird, the eldest one takes good care to secure more than his fair share! His "table manners" are far from good; a small bird disappears down his throat at one gulp!

Six weeks later you may see the three young ones (now with glorious wide wings) take their first lesson in real flying. They have already tried the power of their wings by standing on the nest and flapping. But now the mother calls them from a distant rock; they flap boldly into the air, and fly away to join her. You will notice in our picture the fine spread of wing as the youngster alights. To see the family soaring in graceful curves over the hills is a splendid sight!

Other birds-of-prey frequent the moors. The Kestrel hovers aloft as he watches for mice and small prey. At times the little Merlin may be seen perched on a rock, or

BUZZARD IN FLIGHT

dashing at a lark or pipit. He is a swift, plucky hunter, and in the sport of falconry was known as the Lady's Hawk.

The Buzzard must be given first place for *soaring* flight. But the king of the air is the Peregrine Falcon, to whom Nature has given the most wonderful wings of all. His speed and power in the air are amazing. And for courage and daring no eagle can match him! Woe betide the bird marked down for death by this falcon! There is no escape by flight. The terrible Peregrine *stoops* with a lightning rush, deals one stroke with its talons, and strikes down its prey. If you are standing near, the sound of its wings is like the hiss and shriek of a rocket.

This splendid bird loves high cliffs, but may also be seen on some of our wild moorlands. You may be sure that a bird of such speed and courage as the Peregrine is not a hunter of frogs and moles! It attacks and kills such prey as grouse, crows, jackdaws, ducks, and gulls. Even the swift Homing Pigeon has no chance of escape; the Kestrel and the big Buzzard are at times slain by this fierce falcon.

Being so brave and swift, and always ready to fight and kill, Peregrines were the favourite birds of *falconry*. Both the male and female birds were (and still are) specially trained for this sport. Though the male Peregrine is brave, he is less strong than his mate, being a *third* less in size. He is therefore known as a *tiercel* (third), the female being the falcon. The latter is used for large quarry such as the Heron, and the tiercel for ducks and smaller game.

The *eyrie* (nest) of the Peregrines is, as a rule, on a high, steep cliff. The spire of a cathedral is sometimes chosen

as a nesting-site, and years ago a pair built on Nelson's column in Trafalgar Square! While the tiercel guards the young, the falcon hunts. She brings small birds, such as thrushes and blackbirds, which the male tears to bits with the greatest ease and skill. He then shares out the food to the keen-looking youngsters. The babies are fierce and fearless, even from the first. And they eat so much that there is soon a sad collection of legs, feathers and heads of victims scattered round the eyrie.

Later on, the falcon settles some distance away with the food, and tempts the young ones to fly. Soon they begin to use their new wings, those wonderful wings which make the Peregrine Falcon the king of the air, and the winged terror of the moor.

EXERCISES

1. What is the food of the Buzzard? And of the Peregrine Falcon?
2. Explain these words:—*soaring, eyrie, tiercel, falcon.*
3. Which bird was known as the "Lady's Hawk"?

PEREGRINE FALCON WITH HER YOUNG

BOG MYRTLE

LESSON IV

THE BOG GARDEN (1)

WEARING our stoutest boots we will set out to explore the moorland bog. Skilful drainage has turned many a vast bog into firm, dry land for the growing of crops. But on most moorlands are soft, wet patches of moss and peat, with the plants that will flourish only in such places.

The dense, knee-deep heather becomes thinner as we near the boggy area; and at last we find ourselves amid short, tough, grey-green bushes of another plant—the Bog-Myrtle. Even with our eyes shut we should know by the fragrant smell of this plant that we were nearing wet ground! Instead of the hard, wiry heather-roots of the open moor, we now tread into a soft bed of moss. It stretches before us like a pale-green carpet, dotted with shining heads of Bog-cotton. Now we must go carefully,