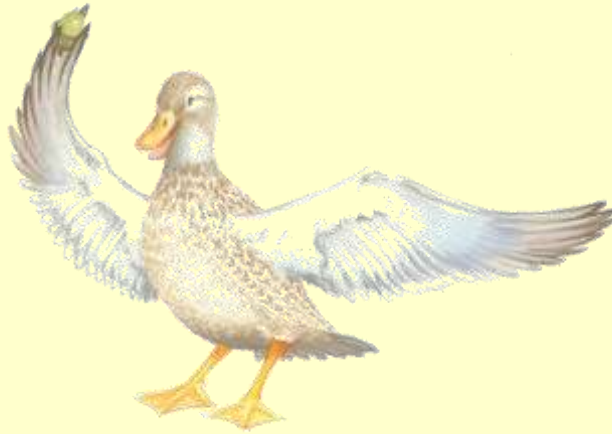


Mrs. Teal's  
**Teachers Handbook**  
Support Materials for Shane Casey Books



There are four titles within the Shane Casey Books series. These are:

1. Nature's Secret Adventures
2. Nature's Hidden Adventures
3. Nature's Marvellous Adventures
4. Nature's Incredible Adventures

Each title contains three individual stories about local wildlife.

Each story aims to introduce nature as it really is, i.e. accurate descriptions of the animal, its habitat and its behaviours. However, some interactions between characters necessitates a degree of artistic licence.

Fact-files on the story's main characters are also included at the end of each book.

The support materials set out below are specifically designed to encompass the objectives of the SESE curriculum, as well as elements of the Language curriculum - specifically creative writing.

We hope you find this handbook useful, and we welcome any comments or feedback.

**Please note:** the books have been designed with dyslexic readers in mind, however they are suitable for all children and can be used in a whole class, inclusive way.

# Support Materials for Shane Casey Books

## Warm-up/ Introduction

There are many warm-up activities that can encourage children to think about nature, however, it is important to elicit a child's existing knowledge and experience, as this is a base for learning, and a starting point for acquiring new understanding.

Ask the children if they have ever been to the seaside, a forest, bog, river, hay meadow, park, local landmark, etc. What did they see, hear, smell, touch?

Where possible, bring children outside to combine active and environmental learning with classroom learning. This can be done in the school yard (school garden if one is available), or a nature walk to a local park or local habitat.

A good way to begin is to get the children to close their eyes and ask them what they can hear or smell (biodiversity appeals to all our senses).

A nature treasure hunt is always popular. We have included some sample treasure hunt activities below to get you started:

- Find something green, brown, yellow, hard, soft, rough, smooth
- Find something a bird might use to build its nest (e.g. twig, grass, leaves, feather, moss)
- Find something a caterpillar would eat (leaves)

Back in the classroom, the following activities are useful:

For younger children, naming plants or animals that begin with a letter of the alphabet is a simple starting point that requires little or no prep work. Note however, that some letters are more challenging than others, and creativity/ mythical creatures may help (unicorn, queen bee, vixen...).

For older children, an odd-one-out game can encourage critical thinking. We have included some examples below to get you started:

- Fox, Rabbit, Daisy (Daisy is a flower)
- Otter, Dog, Badger (Dog is a pet/domesticated)
- Oak, Buttercup, Dandelion (Oak is a tree)
- Butterfly, Bumblebee, Mayfly (All insects, but mayfly live in water)
- Holly, Ash, Yew (Ash is deciduous)
- Swift, Cuckoo, Blackbird (Blackbird is here all year round)

To elicit imagination, ask the children the following:

- If you could be any animal, what would you be and why?
- If you could combine any two animals to create a new one, what two animals would you choose and what would you call it? e.g. giraffe and buffalo could be a Giruffalo

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## Materials for use with all Stories:

The following questions provide a basis for understanding local biodiversity. They can be answered by reading the stories and fact-files.

What kind of animal is the main character?  
What does it eat (herbivore/ carnivore/ insectivore)?  
Where does it live (habitat)?

What other animals/ plants live there (species list from story)? Categorize these by: tree, flower, bird, insect, mammal, fish, and shellfish.

For each plant/ animal, identify what is their relationship to the main character, i.e. predator, prey, friend, neighbour.

Are there animals/ plants in this story found in any of the other stories? Is it a similar habitat? Are there other animals/ plants that are commonly found in this kind of habitat that are not listed in the story? (further research/ homework)

Compare habitats – are they big/small, dry/wet, warm/cold, safe/dangerous, etc.

Create a habitat census, i.e. list the plants and animals found in a hedgerow, forest, grassland, garden/park, in/near rivers, along coastline, etc.)

**Higher Order Question:** Why do you think this habitat is such a popular home for different animals/ why do you think these animals choose to live in this habitat?

Using the illustrations, describe the main characters.  
Compare with the description in the text – scientific vs. creative writing.

List some of the adjectives found in the story. List the different colours, shapes, sounds, smells and textures are found within the habitat? (Biodiversity appeals to all five senses).

What other sounds, smells and textures have you experienced in nature?

Are the adjectives more suited to scientific language, creative language, or both?  
Why do you think this is?

Identify the adjectives that tell us about the personality of the characters.

Create a food chain based on the plants and animals found in the story. Is there a crossover with the other stories?

List some characters that can fly, that can swim, or that can climb. List some characters that are big/small, fast/slow, or shy/confident. Create a chart from smallest to largest.

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## Stories to introduce specific subject areas:

**Pollination:** 'The Life of Bombus Reilly' (Nature's Hidden Adventures).

This story introduces pollination from a slightly different perspective and plays on the adage 'as busy as a bee'. Flowers use colours and fragrances to attract pollinators, however, Bombus is attracted by the flowers who can tell the best stories. As a result, she never seems to be very busy!

Activity: The following questions can be answered by reading the story, fact-files, and a little further research.

What is pollination? What role do bumblebees play in pollination?  
Are there other insects that help flowers to pollinate? (quick answer: honeybees, solitary bees and hoverflies. Butterflies, moths, wasps, beetles and ants also help in pollination, but to a much lesser extent)

If you could hear flowers talk, what kind of story would they tell you, and what story would you tell them?

This is a useful lead-in to the importance of biodiversity and pollination, and any actions being taken by the school for pollinators (see All Ireland Pollinator Plan 'How to Guide' for schools – [www.pollinators.ie/schools](http://www.pollinators.ie/schools)).

Why does Davin the Dandelion play such an important role in this story?  
(Quick answer - Dandelions flower early, when few other flowers bloom, and so provide a food source to queen bees when they emerge from hibernation).

**Higher Order Question:** In the relationship between bumblebees and flowers, do you think bumblebees are more dependent on flowers, or are flowers more dependent on bumblebees?

**Hibernation:** 'The Tale of Two Hedgehogs' (Nature's Hidden Adventures).

This story focuses on choosing and preparing the right location for hibernation.

Activity: The following questions can be answered by reading the story, fact-files, and a little further research.

Why do hedgehogs hibernate? (To survive the winter when food is harder to find, and temperatures are low)

Why is choosing the right location important? (safe, warm, won't be disturbed)  
How do they prepare for hibernation? (they must gain weight to have enough fat reserves to survive the winter – what do they eat? Snails, slugs, earthworms, etc.)

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What other Irish animals hibernate? (Bats, and some insects, such as queen bees, hibernate. Other animals slow down during the winter, but do not truly hibernate).

How do other animals survive the winter? (Quick answer - Squirrels store nuts, badgers enter dormancy, foxes grow thicker fur)

**Higher Order Question:** What advantages or disadvantages do you think animals that hibernate have over animals that don't?

**Migration:** 'A Salmon's Tale' (Nature's Marvellous Adventures), 'Senan's Story' (Nature's Hidden Adventures), 'The Bird with the Big Beak' (Nature's Marvellous Adventures).

A salmon's migration from the river to the sea is part of their lifecycle. It typically only happens once in their lifetime and requires metamorphosis to allow them to survive in saltwater.

A swift's migration occurs annually and involves large distances (Africa to Ireland). This story focuses on the importance of a young bird fledging in time to practice and prepare for the migration.

A curlew's migration is often shorter (Irish wetlands to Irish estuaries).

Activity: The following questions can be answered by reading the stories, fact-files, and a little further research.

What Irish animals migrate? (Ireland is an island, so only animals that can swim or fly)

From where to where, when & why? (Quick answer - overwintering wildfowl and wading birds along coastal areas come from colder climates for our milder winters, while swifts, swallows, cuckoo, etc, come in summer to breed).

What must they do to prepare for migration? (young birds must learn to fly, and must gain enough weight to survive migration). Important lead-in on impacts of disturbance to overwintering birds at lakes, estuaries, and coastal areas.

**Higher Order Question:** Why do you think animals choose to migrate? (Option to link to social science/history, i.e. why do humans migrate, today or throughout history?)

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**Metamorphosis:** 'The Fairy's Foxtrot' (Nature's Secret Adventures), 'A Salmon's Tale' (Nature's Marvellous Adventures).

'The Fairy's Foxtrot' introduces the lifecycle of mayflies and uses the terminology of fishermen. Mayflies undergo an additional lifecycle stage as outlined in the story.

Usually in metamorphosis, the creature looks completely different between lifecycle stages. On the outside, a salmon still looks like a fish after they smolt, but internally, it changes to allow it to survive in saltwater.

Activity: The following questions can be answered by reading the stories, fact-files, and a little further research.

What are the lifecycle stages of mayflies and salmon? (from story)

What other animals metamorphosise? (Quick answer - frogs, butterflies/moths, stoneflies – live alongside mayflies)

Create a life cycle chart for salmon, mayflies, frogs and butterflies. Write an accompanying explanatory note outlining the order and changes that occur.

**Higher Order Question:** If humans (or your pet) could metamorphosise, what changes do you think might happen? (grow wings or gills to fly/ swim, grow extra limbs or acquire new senses)

**Feeding Adaptations:** 'The Bird with the Big Beak' (Nature's Marvellous Adventures).

All animals have evolved different feeding adaptations that allows them to find food in their habitat. Some have become generalists that can eat a wide array of foods, while others have become specialists that target specific food sources that others can't reach. This allows many different animals to survive in the same area, and one of the best examples is wading birds in estuaries.

Activity: The following questions can be answered by reading the stories, fact-files, and a little further research.

What is an estuary?

What type of creatures live in mudflats and sandflats? (list from story or further research). There are many species of snails (periwinkles, whelks), bivalves (hinged shells like mussels or oysters), crustaceans/shrimp-like creatures, and worms.

What overwintering birds come to Ireland each year? (list from story or further research). Godwits, sanderlings, shelducks, teal, etc.

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What type of beak does each bird have, and what kind of prey does it catch with it? This question can lead on to introducing Darwin's Finches, the classic example of **Natural Selection**.

**Higher Order Question:** Think about what you eat each day – which of your teeth do you use? Would you prefer to have just canines, incisors, molars, or no teeth, and what impact would this have on your diet?

**Habitat Specialists & Habitat Generalists:** 'Orla's Big Day' (Nature's Secret Adventures, 'A Fox called Fintan' (Nature's Incredible Adventures)

Certain animals have adapted their bodies, behaviours or feeding habitats to live exclusively in certain habitats. Others have adapted to live in multiple habitats. Habitat specialists are usually of higher conservation value as they tend to be rare, but are also at the greatest risk if their habitat is damaged.

Activity: The following questions can be answered by reading the stories, fact-files, and a little further research.

What makes an otter an ideal river animal? (Webbed feet, long slender bodies for swimming, very sensitive whiskers to detect fish in muddy water)

What makes a fox suitable to live in different habitats (will eat almost anything, uses various hunting techniques and will scavenge, will make a den anywhere).

**Higher Order Question:** Do you think it's better to be a habitat specialist or a habitat generalist? Why?

**Other Themes:** There are many other social/childhood themes addressed by the stories that can be used as part of other lesson plans. Some are outlined below.

- Teamwork (The Tale of Two Hedgehogs)
- Being Kind (The Life of Bombus Reilly)
- Making Friends (Orla's Big Day)
- Overcoming Fear (Senan's Story, The Amazing Tale of Sheridan)
- Death (The Fairy's Foxtrot)
- Respecting Differences (The Bird with the Big Beak)
- Brains over Brawn (A Fox called Fintan)
- Practice makes Perfect (The Song Thrush who couldn't sing)
- Listening to Good Advice (Mother Knows Best)
- Adventure (Chasing Dragons, A Salmon's Tale)



### Five-step creative wildlife writing exercise (using any story as a guide)

Step 1. Introduce your animal character. (Tip – print colour images of a selection of (baby) animals to use as an aid). Give it a name, a personality, and its most striking feature, e.g. *Sheridan was just an ordinary little pygmy shrew, with twitching ears, a sniffling nose and squinty eyes.* (Tip – you're writing a story and not a scientific paper, so be creative in your descriptions, e.g. *Hazel was, without a doubt, the most beautiful hedgehog he had ever seen, with deep brown eyes that were filled with mischief*).

Step 2. Where is your story set? – where would you normally expect to find your main character? (Tip – your setting can be small or large, your entire story can take place in an overgrown ditch! e.g. *Orla's school was on the river bank, not far from the Holt where she lived with her family. Her classroom was under an old willow tree which overhung the river*). Describe the colours, sounds, tastes, smells, textures, etc. (Tip – nature appeals to all our senses, so use as many as you can e.g. *Each morning, the sun would rise above the horizon, drenching the woodlands with light. Then the most beautiful choir would be heard singing. Blackbirds and bullfinches would lend their voices to the chorus, while great tits and thrushes would join in for the encore*).

Step 3. What is happening? – what is your character doing, or what would they like to be doing? Eating or searching for food? Looking for, or building somewhere safe to sleep? Searching for a mate? Playing games? (Tip – in nature, animals spend most of their time searching for the three things they need most - food, shelter, and a mate – but every young animal needs to learn basic skills to survive – young birds must learn to fly, young otters must learn to swim, young foxes must learn to catch their prey – were they scared/excited, and did they succeed?).

Step 4. What happens next? – this is the part of the story where things can get very creative. Some will excel, while others may need a prompt: Does your character meet anyone (a friend or a foe), do they go anywhere or do something they've never done before (an adventure), do they find or discover anything? (Tip – some of the best stories are when you meet a friend and spend the day having fun together – better to have a simple story told well than a complex story that leaves everyone confused).

Step 5. How does your story end? – Relax, you don't have to end on a cliff hanger – *'they all went home and had their tea'* is a perfect ending to any story! Writing takes practice, and story endings take even more practice. (Tip – Ask yourself, did you find the treasure, did you escape certain death, did you achieve what you set out to do. That's what your readers will want to know in the end).



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### **Creative Writing Challenge:**

'The Amazing Tale of Sheridan' (Nature's Secret Adventures) is told from the perspective of Sheridan. Rewrite the story from the perspective of Cheryl and Terry.

Predict an alternative ending, or an alternative adventure, for a character in one of the stories.

### **Other Writing Challenges:**

Recount the creatures that Larry met on his adventure and what they did together. 'Chasing Dragons' (Nature's Incredible Adventures)

Outline the steps involved in pollination. Explain how honey is made (further research/ homework)

Write a menu that would appeal to a pygmy shrew, hedgehog or fox (starters, mains, dessert)

**Sequencing Challenge:** photocopy each page of any story (approx. 14-15 pages), jumble them up, and ask children (in a group or individually) to arrange them in the correct order. This can also be done using a shorter passage of text or the images on their own. What clues tell you if a page is near the beginning, middle or end?

### **Activities for younger children:**

Orla's Big Day (Nature's Secret Adventures) introduces the big dreams of little creatures. Choose a baby animal that is not found in the story, (a printed image is a useful prop) and ask the children what that animal would like to be/do when they grow up. What would the children themselves like to be?

The Tale of Two Hedgehogs (Nature's Hidden Adventures) introduced Hazel and Roland. The pair would meet each night and tell each other everything they had seen and done. What do you think they would they have talked about?

Discuss the emotions felt by (see below\*) when (see below\*) happened. Have you ever felt like this? What made you feel better? What is a nice thing you can do to help?

\*Kirsty when all the other birds were staring.

\*Terrence when his notes came out all jumbled.

\*Senan when he stood at the edge of his nest.

\*Fintan when he was being chased by the others.

\*Orla on her first day in school.

Did their emotions change during the story? Why do you think this happened?