

# Burrowing Crayfish

## 9. Creative scientific life stories



**What do I know about Burrowing Crayfish?**

**Understanding biology and ecology?**

**How am I going to share my knowledge with others?**

### **Lesson Overview:**

In these sessions students create a storyboard to show what they know about Burrowing Crayfish. The students use storyboarding techniques to tell the life story of a Burrowing Crayfish. Each storyboard is used to turn ideas into creative action using ICT (including a focus on stop motion animation or iMovie) to create a digital project. The students can create models using playdoh, illustration or paper collage to tell a scientific story.

**Key concepts:** communicating scientific ideas and information.

**Teaching strategies:** 5 E model, storyboarding, group strategies.

**Equipment & Resources:** storyboard sheet, focused year level, iPads, playdoh and paper, ABC3 RAWR website focus on character development.

**AUSVELS Curriculum Linkages:**

### **Activity Sequence:**

**4 hours (1 hour sessions each)**

1. **Engage:** Share the life of a burrowing crayfish stop motion animation.
2. **Explore:** Using ABC RAWR students will investigate how to create a central character and investigate storyboarding techniques. <http://www.abc.net.au/abc3/rawr/tips.html>
3. The students are to create their storyboards and describe the key features that make the Burrowing Crayfish scientifically interesting in a creative way. They might focus on burrows, claw shape, food, environmental role (aerators of the soil), conservation, wetland changes or habitat climate change.
4. **Explain:** Each student is to create a storyboard idea and create a sequence of 8-10 frames to communicate their scientific ideas. Collaborative groups are allowed
5. **Elaborate:** Sharing your ideas with others. Students are encouraged to bring their storyboard alive. Using iPads students can make stop motion animations using 'stop motion' apps. The process involves students working in teams to complete the storyboard animation. Playdoh sculpture is made and using stop motion app the story is told frame by frame. Students will need to take at least 120 frames to make the animation and will need to keep the iPads still and centred. It is best completed with a partner.
6. **Sharing the stop motion animation.** To share the stop motion animation, share the file to the camera roll and share with the class using reflector or ipad connectors.

## **Teachers working example:**

### **Setting up the animation:**

This session brings together the learning of the students from sequential sessions. The key questions from the mini conference investigated further

1. Habitat – What types of places do we find them? What type of home does it have?
2. Ecology- What does the burrowing crayfish do in the environment?
3. Research –How do scientists help them? What do they do?
4. Future – What will happen to them in the future? Will the number of crayfish grow?
5. Care and protection – What are the main threats to them? How can we help to look after them?

Students from grade 3-6 can use the storyboard sheets contained in this unit. Secondary students can use the ABC 3 RAWR storyboard found by accessing the link contained.

Your digital project must include information about:

Description:

What are they? Are they similar to aquatic crayfish? How are they similar?

Habitat:

Where do they live? Does it have to be wet?

What are chimneys? What function do they have?

Food source:

What do they eat? How do they eat their food sources? Do they use the claws to assist this?

Care and Protection:

How can we help the burrowing crayfish?

Scientific work:

How to scientists and the community help the crayfish?

## Burrowing Crayfish Digital Animation

Your challenge is to create a stop motion animation to show and share your science knowledge about the Burrowing Crayfish.

Science focus: Grade 3 -

Focus on 'COMMON FEATURES you can SEE'

What are the main observable features of the crayfish?  
What makes a burrowing crayfish part of the crustacean family?

- **What does it look like? APPEARANCE**

1. Colour: Black and brown (How does this help the crayfish?)
2. Body: The body of the crayfish (What does it look like? Is it hard or soft)
3. Claws: Shape and size (What reason would one be bigger than the other?)
4. Legs: What are the smaller claws for? (Feeding? Walking?)
5. Tails: Why are they so small? (How would this help a land crayfish/)

A story of a crayfish:

**Story board title:**

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Grade 4 – Focus on:

**'PLANTS AND ANIMALS DEPEND ON EACH OTHER AND THE ENVIRONMENT TO SURVIVE'**

How do the Burrowing crayfish depend on other living things to survive?

**What are the needs of the crayfish?**

1. Food – what does the burrowing crayfish eat? (Omnivore = plants and insects)
2. Shelter – What structure does the crayfish build to give it shelter?
3. Habitat – What types of places do you find burrowing crayfish?
4. Mates – Crayfish need mates to reproduce and are social creatures.

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Grade 5 – Focus on:

‘Structural adaptations help living things to survive’

How do body features of the Burrowing Crayfish help them to survive?

What are the features of the crayfish?

1. Colour:
2. Body: The body of the crayfish (What does it look like? Is it hard or soft)
3. Claws: shape and size (What reason would one be bigger than the other?)
4. Legs and Tails: (Why are they so small?)

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Grade 6 – Focus on:

‘Growth and survival of living things are affected by physical conditions’

What might affect the growth and survival of the burrowing crayfish?

What are the threats to the crayfish?

1. Food
2. Habitat destruction
3. Loss of wetlands
4. Global warming

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