

# NATURE DETECTIVES

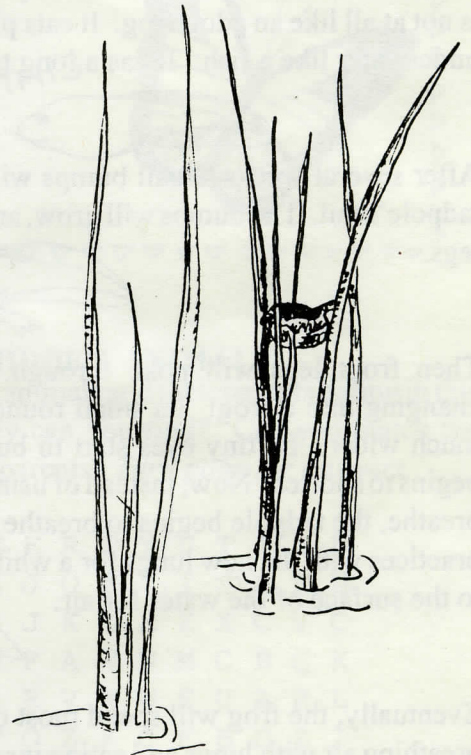
## ANIMAL BABIES

Spring! The marsh is full of new life. Buds are popping. Weeds are sprouting. A fuzzy flotilla of young ducklings swim across Cottonwood Marsh. For safety, they are sandwiched between their parents on their first outing. Slung between cattails is a red-winged blackbird nest--a hammock home! Three young blackbirds squawk as their parents bring food. Their gaping mouths seem to say, "More! More!" Tadpoles nibble on microscopic pond life at the water's edge. Suddenly a movement or shadow warns them. Whoosh! They swim to deep-water safety, their tails wiggling frantically. Turtles, large and small, bask in the sun on their log islands. Sounds of humming and buzzing fill the air. As do swarms of no-see-ums and mosquitos! Everywhere you look are signs of new life!

Why are all these babies born in the spring? Why do so many birds, mammals, midges, and mosquitos have April or May birthdays? After all, humans are born year round, from January to December.

The answer is food! Animal babies are timed to arrive when food is plentiful. They have a lot of growing to do. They need to eat and eat. The ducklings gobble up pond plants and a few tadpoles. The blackbirds feast on insects, including mosquitos. The female mosquito bites a mammal to get a meal of blood. Then she lays her eggs in the pond. Some mosquito eggs are eaten by fish. Some hatch into larvae (wigglers). Many larvae are eaten by shorebirds, ducks, or turtles.

There is an entire cycle of eating and being eaten! Yet life is so abundant, some of each kind of animal survives. That's what spring is all about.





## STICKY JELLY BLOBS

If you visit a pond this spring, be on the lookout for quivering, jelly-like clumps lurking under the surface of the water. You might think these sticky blobs were left by a make-believe swamp creature. But, they are actually something much more interesting - EGGS! Frog eggs, to be exact.



The eggs have no shells. You can look right in! When the eggs are about four days old, you'll see a small black dot in the middle of a clear, pea-sized egg.



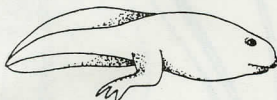
After one week the dot will begin to change shapes. It may even start to wiggle around in its jelly bubble. Can you tell the head from the tail?



A few days later, the outer jelly softens and out...swims...a...tadpole! The newly hatched baby frog is not at all like an adult frog. It eats plants and breathes underwater like a fish. It has a long tail and no legs.



After several weeks, small bumps will form above the tadpole's tail. The bumps will grow, and grow, into back legs.



Then front legs will poke through. The tadpole is changing into a frog! Its small round mouth becomes much wider. Its tiny eyes start to bulge. Its long tail begins to shorten. Now, instead of using fish-like gills to breathe, the tadpole begins to breathe air with lungs. It practices with the new lungs for a while by making trips to the surface of the water for air.



Eventually, the frog will spend most of its time on land breathing air with lungs and eating insects. After spending the cold winter months under frozen soil, the frog returns to the pond in the spring to help make a new batch of gooey, jelly eggs!

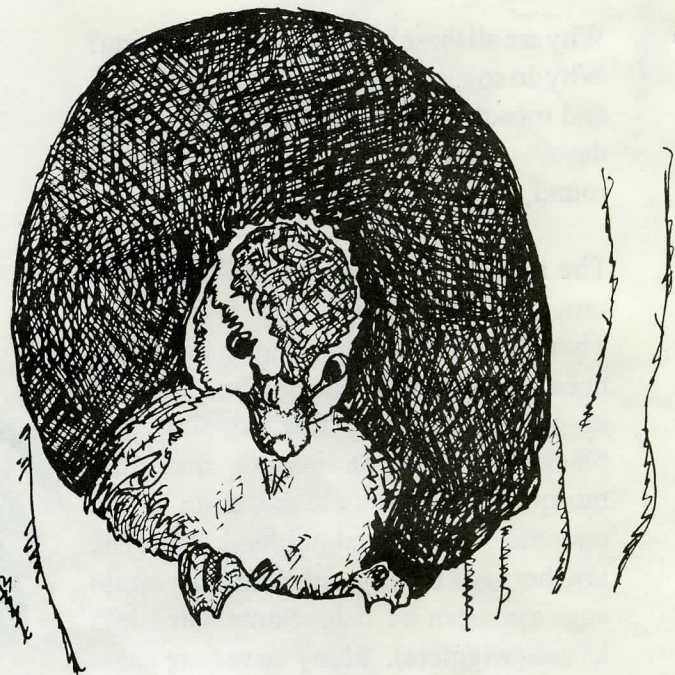


## ON THEIR OWN?

Some baby animals are able to follow their parents right away after they are born. These animals are called precocial (pre-KOH-shul). Precocial wood ducks can jump out of their nest and flop to the ground or water just after hatching. Less than an hour after birth, pronghorn babies stand and run. They do this to avoid being eaten by predators.

Other animal babies are born helpless. These babies are called altricial (al-TRISH-ul). Mice are not covered with fur until they are one week old and their eyes open after one and a half weeks. Baby cats are usually born fully furred but are helpless until their eyes and ears open. Even after they can see and move, these babies still rely on their parents for quite awhile.

Do you think that ground-nesting birds, like pheasants, are well developed and considered precocial at hatching time? Or, are they poorly developed without feathers and totally dependent upon their parents? CLUE: As ground nesters, pheasants are easy prey for larger predators.

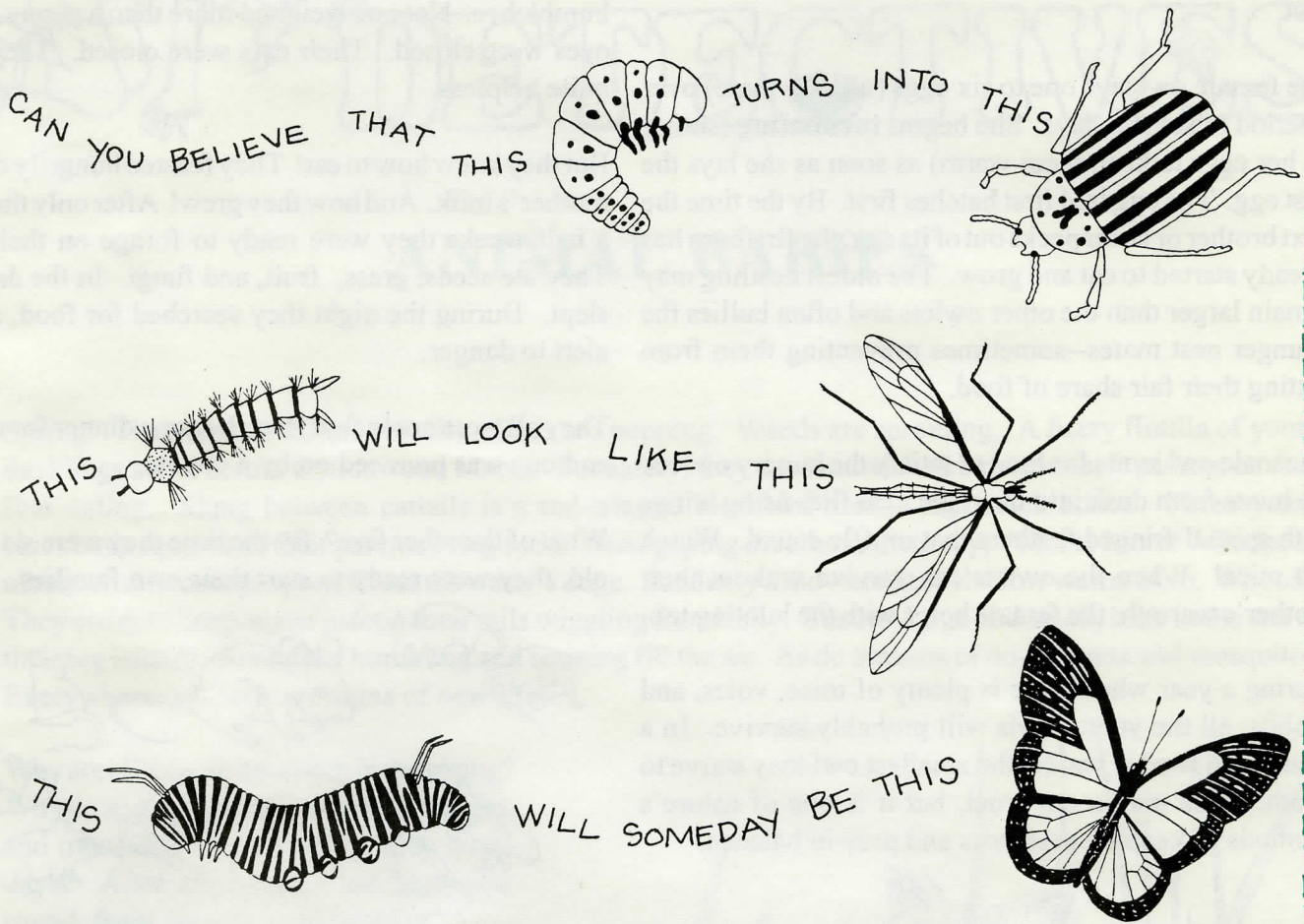


ANSWER: Baby pheasants are born with feathers and eyes that are wide open. Within only 2 weeks, they can fly. They are just the opposite of most tree nesters, who hatch naked, blind and dependant on their parents for a long time. So pheasants are more like precocial animals.



## IT'S LIKE MAGIC!

Bunnies look like rabbits. Colts look like horses. But many insects change very much while growing.



## A HOME FOR BABY

When you think of a nest, do you picture something that looks like a bowl made out of twigs? Birds keep their eggs safe in all types of nests. They build nests in all shapes and sizes. A nest may be a simple layer of pine needles, or a tunnel on the side of a sunny cliff. Birds even make nests that look like fancy hanging baskets.

Birds build their nests out of many different things. Some birds always use the same things to build nests. Some items they use include feathers, twigs, and hair. Other birds are less picky and they build their nests out of whatever they find. Imagine coming out of an egg into a nest made of plastic scraps, carpet pieces and paper clips! If you made a nest, what would it look like?

## HIDDEN ANIMALS

There are 10 baby animals and their parents hiding in this game. How many can you find? Can you match the babies with their parents? *Turn page for answers.*

Q B W E R T Y U T I O D  
P E A J O E Y I S D F U  
G E H J K L K Z X C V C  
B T N F A W N M C B Q K  
D L A R V A W E U A R L  
E E T O Z X C F B D Z I  
E V Y G O S L I N G B N  
R R Q R O W X S Z E F G  
F N M M F O X H P R P L  
D U C K A P S H H P A Z  
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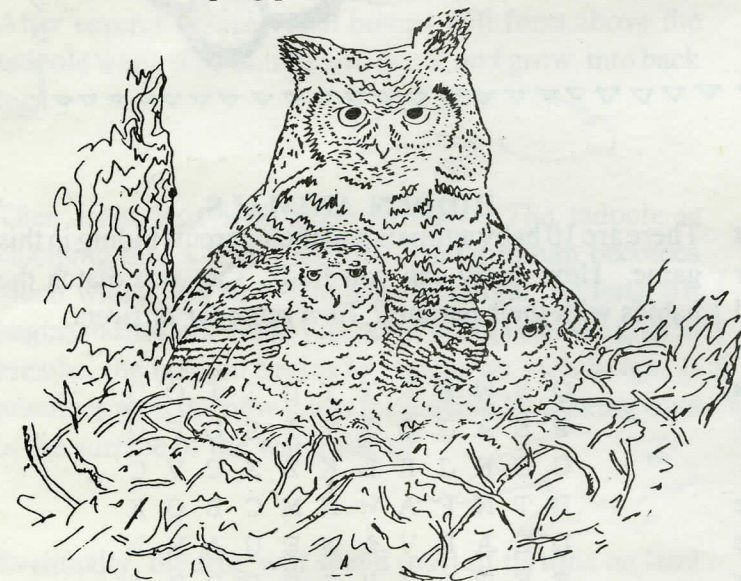
## WHO-HOO-WOO!

Great horned owls nest early in the year so that they are prepared for mouse season. They don't build their own homes, they take over an old hawk, magpie, or squirrel nest.

The female owl lays one to six eggs (usually three) over a period of several days. She begins **incubating** (sitting on her eggs to keep them warm) as soon as she lays the first egg. The egg laid first hatches first. By the time the next brother or sister pecks out of its egg, the firstborn has already started to eat and grow. The oldest nestling may remain larger than the other owlets and often bullies the younger nest mates--sometimes preventing them from getting their fair share of food.

The male owl hunts for food to satisfy the hungry owlets. He hunts from dusk into the night. He flies using wings with special fringed feathers that muffle sound. Watch out mice! When the owlets can survive without their mother's warmth, the female helps with the hunting too.

During a year when there is plenty of mice, voles, and rabbits, all the young owls will probably survive. In a year when food is scarce, the smallest owl may starve to death. This may seem cruel, but it is one of nature's methods of keeping predators and prey in balance.



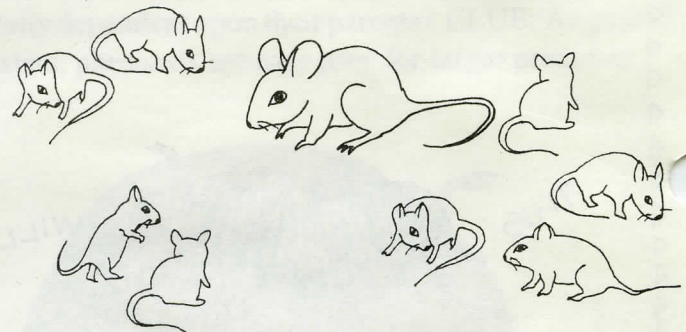
## MOUSE MOTHER

One April day, in a cozy nest beneath a fallen log, a deer mouse mother gave birth to eight babies. The babies were pink and furless. Each baby was about the size of a bumblebee. Not one weighed more than a penny. Their eyes were closed. Their ears were closed. They were quite helpless.

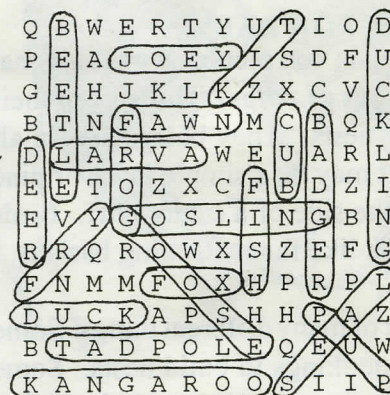
But they knew how to eat! They feasted hungrily on their mother's milk. And how they grew! After only three and a half weeks they were ready to forage on their own. They ate seeds, grass, fruit, and fungi. In the day they slept. During the night they searched for food, always alert to danger.

They all were not lucky! Two became dinner for an owl, and one was pounced on by a coyote.

What of the other five? By the time they were six weeks old, they were ready to start their own families.



## HIDDEN ANIMALS ANSWERS



ADULT	BABY
Duck	Duckling
Goose	Gosling
Badger	Kit
Seal	Pup
Deer	Fawn
Fish	Fry
Frog	Tadpole
Beetle	Larva
Kangaroo	Joey

## NATURE DETECTIVES: NEST CONSTRUCTORS

Have you ever wondered how birds are able to put together nests when the only tool they have is their small beak? Find out just how easy (or difficult!) it is to build a nest of your own. We'll take a close-up look at some nature-made nests and eggs. See the "Discover Nature" calendar for details.