

The Burrowing Owl Game of Life!

*Recommended age: 5th grade and up
1-10 players per printed 40-card set*

In this game, you'll see life through the eyes of a Burrowing Owl trying to make its way through an increasingly urban environment. Experience the life stages of the owl and learn about the benefits and consequences of human impact on its habitat.

The objective of the game is to grow up and reproduce! Start as an egg, and then make it through the life stages of chick, juvenile, and adult to win.

Introduction:

Burrowing Owls are very small; adults are only 7-10 inches tall! Instead of living in trees, they live in burrows in the ground, and they rely on small mammals like ground squirrels to make their homes. Burrowing Owl habitat is generally open, dry grassland. Unfortunately, this is the type of land that gets developed as cities in the Bay Area expand. The owl is also vulnerable to poisons that humans use to control wildlife. Luckily, many people care about the Burrowing Owl and are learning how to protect and conserve the habitat it needs to continue living in the Bay Area.

Remember, plants and animals in nature rely on each other to survive. This means that sometimes Burrowing Owls eat other animals, and sometimes Burrowing Owls become the food other animals need for energy. That's how an ecosystem works. As humans, we are part of the ecosystem, too. Instead of destroying it, we can support it and keep it healthy.



Burrowing Owl chicks



Juvenile Burrowing Owls

Materials:

- 40 printed playing cards (10 for each life stage: egg, chick, juvenile, adult; 5 success, 5 fail for each life stage, but see *Tips*)
- Materials to denote rows/players (see set up options)

Set up:

Print the cards found at the end of this document (either print double-sided or glue/tape the front and back of the cards together).



Adult Burrowing Owl

Option A) Tabletop set up:

On a flat surface, create 4 rows using tape, straws, string, or other materials you have. Each row is for a different life stage (egg, chick, juvenile, adult). Create 4 decks of cards, one for each life stage, and place the deck near its corresponding row. The name of the life stage should be face up. Each player chooses an object to represent themselves (such as a stuffed animal, coin, figurine, etc.) and places their object in Row 1: Egg.

Option B) Open space set up:

Choose an open space and create 4 rows. Mark them off with cones, chairs, chalk, tape, or other materials you have. Each row indicates a life stage (egg, chick, juvenile, adult). Create 4 decks of cards for each life stage and place each deck near its corresponding row. The name of the life stage should be face up. Line up all players in Row 1: Egg.

Tips:

- Consider the proportion of Success to Fail cards. If you use all the cards (50% success/50% fail), it will be very challenging to win (~6% chance). If you want a shorter game, try 10 Success to 4 Fail cards for each category (~26% chance). Note: the maximum number of players is the number of cards you start with in the Egg deck.
 - It is easy to re-sort by Success/Fail—just look at the last line. It will say something like “Go back to Start” or “Step forward,” “You win!” It is intentionally not more obvious so that players must read the cards to discover their fate.
- Expand the game by playing virtually with friends and family over video chat! Each group of participants just needs their own set of cards to play.

Directions:

1. Give a brief intro to the game (see above).
2. Each player draws 1 Egg card.
3. Each player reads their card out loud in turn and takes the action on the card. If a player advances, they should return the Egg card to the Egg deck and move to the Chick row. If a player does not advance, they should remain in the Egg row and return the card to the Egg deck. Shuffle the deck. After all players take their actions and return their cards, Round 1 ends.
4. For Round 2, each player draws a card from the deck of the life stage they are in (either Egg or Chick). Again, each player reads their card out loud in turn and takes the action on the card. Some will advance, moving to the next life stage. Others will go back to start over from the Egg stage. After completing the action on the card, return the card to its corresponding deck and shuffle.
5. Continue the game until someone “wins,” becoming an adult and reproducing. Depending on how it goes, several people might win in the same round. Or, if the game ends too quickly, continue for second and third place, or until everybody wins.

Optional debrief: At the end of the game, consider asking these questions:

- What are some threats that Burrowing Owls face?
- What can you do to help Burrowing Owls?

You are an egg, laid in a burrow built by a ground squirrel. You feel safe and warm because your mom is there to incubate you. You hatch! Step forward.

There is a flash flood, and your burrow collapses! Better luck next time. Try again.

Your mom finds an artificial nest burrow! It was built by scientists to give you a home. You hatch! Step forward.

A nearby road is repaved. Dirt is dumped over your burrow and fills it in. Better luck next time. Try again.

You and six other eggs are in the nest burrow with your mom when a red fox comes by! Your dad is outside the burrow and he scares the fox away. You hatch! Step forward.

A feral cat attacks your burrow and eats you. Better luck next time. Try again.

Your mom keeps you warm while your dad brings her food. Herbicides are not allowed on this land to control weeds, so your parents are healthy and strong. You hatch! Step forward.

Your nest burrow is in the perfect spot until a golf course is built on top of you. Your parents have to fly off. Better luck next time. Try again.

<p data-bbox="467 369 532 407">Egg</p>	<p data-bbox="1089 369 1154 407">Egg</p>
<p data-bbox="467 741 532 779">Egg</p>	<p data-bbox="1089 741 1154 779">Egg</p>
<p data-bbox="467 1113 532 1150">Egg</p>	<p data-bbox="1089 1113 1154 1150">Egg</p>
<p data-bbox="467 1484 532 1522">Egg</p>	<p data-bbox="1089 1484 1154 1522">Egg</p>

A skunk passes by, but it can't smell you because your burrow is lined with cattle dung. You hatch! Step forward.

Your parents are kicked out with a bunch of other owls so that a luxury apartment complex can be built. Better luck next time. Try again.

You are a chick in a nest burrow with your brothers and sisters. Your parents bring you mice to eat. You make it! Step forward.

Your parents are out hunting. They must travel far because there are few insects and mice in the nearby parking lots. In the meantime, a hawk comes and eats you. Better luck next time. Go back to Start.

Some hawks come looking for dinner, but the owls in the nearby burrows scare them off. Good thing you are nesting together! You make it! Step forward.

Some developers move your whole family to new land so they can build an office park. You can't find a burrow! Better luck next time. Go back to Start.

You are a cute little chick. You just lost your down feathers and you are growing juvenal plumage. You make it! Step forward.

The ground squirrels are poisoned because they are a nuisance to people. But some mice eat the poison, and then your parents feed you the mice. Better luck next time. Go back to Start.

Egg	Egg
Chick	Chick
Chick	Chick
Chick	Chick

Your parents are feeding you so many beetles and crickets. These insects are doing well because insecticides are not in use. You make it! Step forward.

A new shopping mall is built right next to your burrow. A lot of the animals are gone, and your parents can't find food for you. Better luck next time. Go back to Start.

A company wants to buy land and build on it, but people are able to protect the land. You will get to stay in your burrow and grow up. You make it! Step forward.

You are waiting at the entrance to the burrow for food, when a crow swoops down and grabs you. Better luck next time. Go back to Start.

Local groups stop setting up feeding stations for feral cats. Now the cat population is lower, and you are able to survive. Congratulations! Step forward.

Many ground squirrels have been poisoned near your home. When you go off on your own to find a burrow, there are none. Better luck next time. Go back to Start.

Now you are flying and hunting on your own. You find an artificial burrow built by conservation scientists. Congratulations! Step forward.

You find a new burrow, but then you ingest a mouse that ate the ground squirrel poison. You get very sick and cannot hunt for food. Better luck next time. Go back to Start.

Chick	Chick
Chick	Chick
Juvenile	Juvenile
Juvenile	Juvenile

Since you are a California Species of Special Concern, a local environmental group is able to save 50 acres of grassland habitat from becoming a housing development. Now you can find a burrow. Congratulations! Step forward.

You are moved from your home so a hotel can be built. The new land does not have enough burrows and the grasses and vegetation are too high. Better luck next time. Go back to Start.

When you are ready, you fly south down the coast in search of a wintering habitat. You find a pasture grazed by cattle. The grasses are short (the way you like them) and you find a burrow. Congratulations! Step forward.

You are denied status under the California Endangered Species Act. A large tech company will build near your nest burrow, and you will not be able to find a burrow of your own to raise chicks. Better luck next time. Go back to Start.

In one city, the use of some toxic poisons is banned. More ground squirrels survive and build burrows. You are able to disperse from your nest burrow and find a new home. Congratulations! Step forward.

Once you begin to fly and hunt on your own, you go out in search of a burrow. You are still learning how to fly well, and you crash into a wind turbine. Better luck next time. Go back to Start.

Some pesticides are banned in your wintering habitat. You are able to stay healthy, and you return to the Bay Area in the spring to reproduce. You have four baby chicks! You win!

Wow, you make it to adulthood! Unfortunately, you are out hunting by the road and you are hit by a car. Better luck next time. Go back to Start.

Juvenile	Juvenile
Juvenile	Juvenile
Juvenile	Juvenile
Adult	Adult

An emergency sewer repair is needed near your burrow. Because you and your fellow owls are breeding, the construction workers are very careful not to disturb you. You have five chicks! You win!

You find a mate. Good job! Unfortunately, while you are out hunting, you get caught in a barbed wire fence. Better luck next time. Go back to Start.

You find a mate and you are incubating your eggs. A tech company wants to build offices and housing on your land, but the city makes them choose a new location. You have six chicks! You win!

You find a mate. Good job! But your eggs are crushed when roadwork collapses your burrow. Stay here. Before the season is up, you will Try again.

Local open space managers plant native grasses for you. The grass is mowed so you can nest and see predators. The burrows are protected and your eggs do well. You have three chicks! You win!

You are caring for your eggs in an owl colony by the San Jose Airport. This has always been your home, but the airport is expanding. You will lose your eggs and your burrow. Better luck next time. Go back to Start.

A new development project plans their land use around you. They make sure your breeding habitat stays connected to land you use to forage for food. You have five chicks! You win!

In winter, some owls stay in the Bay Area, while others (like you) migrate south. You are hunting near your winter burrow in fields sprayed with pesticides. They get in your body and now you can't reproduce. Better luck next time. Go back to Start.

Adult	Adult
Adult	Adult
Adult	Adult
Adult	Adult