

The Man Who Taught Me To Fly

Lessons for the short film and story of Yossi Leshem



INTRODUCTION AND TABLE OF CONTENTS

This guide includes lessons and activities for use in both formal and informal educational settings as a companion to "The Man Who Taught Me To Fly" video. The units have been designed to be adaptable for use across a wide range of ages. Some of the activities focus on connections to Jewish life or life in Israel, while others relate more to the broad human questions in the story. The first page features some broad discussion questions about the general themes of the video.

Key Discussion Questions

- i. What's your calling?
 - a. Yossi Leshem knew from an early age that he wanted to devote his life to the birds and people of Israel. How did he do it?
 - b. Do you know other people who have made their passion into their life's work?
 - c. Do you care about something as much as Yossi cares about birds? How could you imagine making your passion into your life's work?
- ii. For whom are we responsible?
 - a. For whom does Yossi feel responsible?
 - b. Do Yossi's responsibilities ever conflict with each other? How does he resolve the conflict?
 - c. Do you feel more responsible for certain people or groups? Do you feel responsible for an animal or for a group of animals? Do you feel responsible for the environment?
 - i. Has there ever been a time when these responsibilities conflicted? What happened?
- iii. What do we choose to ignore?
 - a. From an early age, Yossi warned people about the danger of airplanes and birds sharing the same airspace. Yet few people listened. What made people finally hear his message? Why did they not listen before? Why did they listen now?
 - b. Do you know of other stories of people who aren't listened to? Did they see something differently? What happened?

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SPREADING HIS WINGS

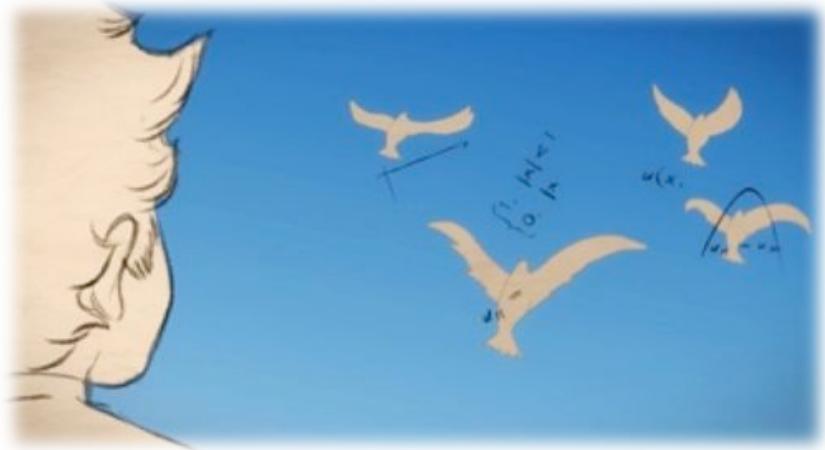
Making a Passion into a Vocation

What do you want to be when you grow up? It's a question every grownup asks. And there's a good reason: everyone has a dream.

From the time he was young boy, Yossi Leshem wanted to fly with the birds. As a grownup, Yossi made his passion into a career as one of the world's leading experts on birds, their migration patterns and habits. He has also helped saved the lives of thousands of birds and humans through his research into bird migratory patterns. Yossi made his childhood fantasy into his life's work because he dared to dream.

Activity

Think about something you really enjoy doing. Is this something you want to do forever? Could you imagine making your passion into a career?



1. Hand each student two outlines of people with three sections to fill in. Next to the person's head, there should be a space labeled "Think"; next to the heart, a space labeled "Feel"; and next to the feet, a space labeled "Do."
2. Ask students to fill in the first sheet using Yossi as an example. Ask, What did Yossi think and feel that led him to "Do?" What was he passionate about? What led him to take action and how did he impact the world through his actions?
3. After the students fill in the image, discuss their outline of Yossi as a class or in smaller groups. Ask, what inspired Yossi to take the final steps and act on his passion? What challenges do you think he faced? How do you think he overcame those challenges?
4. Then ask the students to fill in the second sheet about themselves. Tell the students to think about the following questions as they fill out their outline: What are you passionate about? What causes or future careers do you often think about? How do they make you feel? What actions do you plan to take? How can you change the world by "doing" something about your passions? What challenges may you face in reaching your goals and how may you overcome them?

BIRDS OF A FEATHER

Birds Eye View of Jewish Tradition



Jewish tradition teaches that Jews are responsible for taking care of animals. We are “stewards” of the earth, and thus we are commanded to care for all of God’s creatures. Birds are no exception. Yossi took this responsibility seriously and combined his love of Judaism and science to find a way to protect birds and humans.

Here are some teachings from Jewish text and tradition about our responsibilities toward animals:

1. “The Lord God took the man and put him in the Garden of Eden to work it and take care of it.” (Genesis 2:15)
2. “If you come across a bird’s nest beside the road, either in a tree or on the ground, and the mother is sitting on the young or on the eggs, do not take the mother with the young. You may take the young, but be sure to let the mother go, so that it may go well with you and you may have a long life.” (Deuteronomy 22:6-7)
3. We cannot ride on animals or lean against them [on Shabbat], and it is even forbidden to use the side of them... and if one got on an animal, even intentionally, he must come down because of pain to the animal. (Shulkhan Arukh, Orah Hayim 305:18)

Activity

1. Place each of these quotes on a piece of butcher paper and spread them out along the walls of the classroom.
2. Instruct students to walk around the room and read every quote, asking to clarify words they may not fully understand.
3. Ask them to stand next to the quote to which they most relate.
4. With their groups, have them discuss the quote and collaboratively create a mural depicting what they think the quote is trying to say. The mural can include images, poetry, a short story, a campaign to encourage others to care for animals, etc.
5. Each group can then present their quote and mural to the rest of the groups.

For older students:

1. Students can create tzedakah campaigns for the protection of animals using one of the quotes or additional Jewish quotes that they find.
2. They should extend their campaign outside of the classroom through posters, speeches, clean-ups.
3. This would be an opportunity for students to reach out to organizations in their communities that work to protect wildlife and specifically birds. Ideas for organizations: Local chapter of the National Audubon Society (<http://www.audubon.org>, a local science museum, or local botanical gardens.)

What's Jewish About Birds?

Lesson for Older Students

Jewish sources on birds and the caring of animals

1. "A person should not acquire domestic animals, bird or wild beasts without first buying food for them to eat." Jerusalem Talmud 4:8
2. "It is forbidden to sit down to your own meal until you have fed your pets and animals. As it says 'I will give feed to your animals.' And only after that does the text say 'You shall eat and be satisfied' (Deuteronomy 11:15)." Babylonian Talmud Berachot 40a
3. "Remember the Sabbath day, to keep it holy. Six days shall you labor, and do all your work; but the seventh day is a Sabbath unto the Lord, thy God, in it you shall not do any manner of work, you, nor your son, nor your daughter, nor your man-servant, nor your maid-servant, nor your cattle, nor the stranger that is within your gates."

The texts above are just a few of the many sources in Jewish tradition that talk about caring for animals. Jewish tradition is explicit in teaching the importance of caring for animals, even before ourselves.

- Why does Jewish tradition place such an emphasis on ethical treatment of animals?
- Are there times when these values conflict with other values? How do you understand those conflicts?



Activities

- Create a debate in class for or against vegetarianism
- Create a debate for and against keeping pets
- Have students create a bulletin board that educates others as to Jewish law regarding the treatment of animals





THE EAGLE (HOPOOE) HAS LANDED

Choosing a National Bird

How do you make a million people care about birds? This was the challenge Yossi Leshem faced as he strived to engage Israelis in caring for the world around them. Yossi, and his colleague Dan Alon, came up with an idea that would help increase awareness of birds and nature in Israeli society. In May of 2008, Israel celebrated its 60th birthday, and to mark the occasion a campaign was launched to choose a national bird. The United States has the bald eagle, Canada has the loon. Now Israel would have its own national bird.

The campaign involved finding a bird that reflected Israel's national character. Candidates included birds that were colorful, made pleasant sounds and nested in Israel. Having a biblical connection was a bonus. Bird experts selected 50 initial candidates that were then narrowed down to 10. Israel is a democracy, so the national bird was selected in a national election!

The Society for the Protection of Nature in Israel (SPNI) posted pictures and descriptions of the “candidates” on their website. Newspapers and television stations reported on each candidate and their election activities. Ballot boxes were placed and every military base in Israel and the public voted online or by phone.

The choice was too important to be left to adults alone. 4,000 of Israel's public schools and 9,500 kindergartens were given the chance to vote too. During the month prior to the election the children learned about each of the candidates and the threats to its environment. In the end, 350,000 people cast their votes. Israel's president, Shimon Peres, announced the winner: The hoopoe! This election proved to be a great lesson in birding and democracy.



Questions to Consider...

- Why the focus on birds? Why a national bird? How do birds contribute to the environment in which we cohabit?
- Why was the hoopoe chosen? Do some research online to find out.
- Have you ever wondered how your state/country chose its national bird? What is your state's bird and how does it reflect your state motto or characteristics of citizens of your state.
- What have you learned about birds that you didn't know before? How will you go about learning more about birds in your community?
- What would your campaign look like?

Activity

How would you go about selecting a bird for your school?



1. Split students into groups.
2. Introduce the TV Show *Shark Tank*. Ask if anyone has seen the show. Describe the show*
3. Explain to the students that they are going to play *Shark Tank*. Instead of selling a product, they are going to choose a bird that is indigenous to their community and try to convince their classmates that the bird they picked should become their "School Bird" or "Temple Bird."
4. Each group will research birds within the local community and choose a bird around which to create a campaign. Students can make posters and videos making a case for their bird. They can decorate the classrooms and hallways with images, facts, and reasons to vote for their bird.
5. Students present their birds to one another. Presentations should consist of at least one visual sign and a 1-2 minute pitch or skit.
6. Key questions to consider:
 - What makes your bird unique?
 - How does your bird best represent your local community? What Jewish values does it represent?
7. Each group presents their campaign to the rest of the group. Groups vote on the campaign they like best (they can't vote for their own).
8. Votes are counted and the winners are announced.



* *Shark Tank* is a hit ABC TV show that features a panel of five wealthy investors called "sharks" who consider offers from entrepreneurs seeking investors for their business.

THE EARLY BIRD CATCHES THE WORM

Birds and the Environment



Israel is a fueling station for millions of birds each year. The birds that fly through Israel help pollinate plants and distribute seeds across countries and continents.

Yossi Leshem's research has shown the extent to which birds contribute to rodent and insect control. For example, owls are known to hunt rodents at night, and kestrels (small hawks) hunt during the day. One of Yossi's goals has been to help the environment by replacing pesticides with natural predators. He practiced his theories on Kibbutz Sde Eliyahu in northern Israel using owls to lower the rodent rates and was very successful.

Present one or more of Israel 21C's resources or videos to your class before the activity:

1. Top 10 environmentalists helping out Israel. Yossi is listed as #1: <http://israel21c.org/environment/the-top-10-environmentalists-helping-green-israel/>
2. Yossi develops early warning system for avian flu: <http://israel21c.org/technology/israeli-bird-expert-develops-early-warning-system-for-avian-flu/>
3. In an effort to control the rodent populations in major cities, Yossi is transporting more families of owls across borders: <http://israel21c.org/social-action-2/israels-pied-piper-leads-barn-owls-from-tel-aviv-to-san->

Activity

Each bird has a story and identity: where it comes from, where it's going, and what it's doing along the way. Consequently, each bird contributes in its own way, adding a unique element and color to the shaping landscape of Israel and the world. Provide each student with an Israeli bird identity. Ask them to research the habits and facts about that particular bird. Facts might include:

- Food that the bird eats
- Migration patterns
- Other birds that the bird hangs out with
- Mating habits/rituals



Have students create a story about the bird's journey during the year. Then have them put that story into a storyboard—like a comic strip; or have them make a video of their bird's story. Then have them present to the class.



IT'S A BIRD, IT'S A PLANE...

Creating a Safer Sky

After nearly 60 million years during which birds were the sole occupants of air space, Yossi realized that birds and humans now needed to share the sky. Since humans began to fly in the early 20th century, encounters between humans and flocks of airborne birds had led to accidents and injuries. As the 20th century marched forward and airplanes became more numerous, the challenge of shared airspace grew. In Israel, it was an even greater problem: Because Israel is very small, it has very limited airspace, while twice every year over 500 million birds fly overhead between Europe, Asia, and Africa.

- Collisions in shared airspace:
 - Between 1972 and 1982 the Israeli air force suffered thousands of bird strikes. Thirty-three caused severe plane damage. In five of these collisions, the aircraft was demolished. In one instance, the pilot was killed.
- Military technology and the creation of the glider (flying with the birds):
 - After a bird strike in 1982 in which a buzzard crashed through the windshield of an Israeli fighter plane, the military agreed to fund Yossi's development of a motorized glider that would aid him in mapping bird migration patterns.
 - The motorized glider has an engine that allows it to take flight like a plane, but turn off once it's in the sky, in order to glide like a bird for up to 11 hours. Yossi had to get used to flying next to different types of birds, especially pelicans—which were easily frightened. In the glider, Yossi was able to count every bird in the flock and track the exact migration pattern of the birds flying through Israel, including their altitude, speed, and direction.
 - In addition to the glider, the IDF provided Yossi with a drone that could be controlled by remote control to track the birds. The drone flew around 5,000 feet above the birds to avoid frightening any of them.
- Sharing the knowledge with the world:
 - Yossi's mapping research has led to worldwide collaboration and sharing of knowledge of bird migration patterns. Yossi contacted colleagues throughout the Middle East. Under the name **Migrating Birds Know No Boundaries**, Yossi's idea evolved into a joint research and educational program involving students in Jewish-Israeli, Arab-Israeli, Palestinian and Jordanian Schools.
- Yossi's work today:
 - Yossi has helped to establish Israel as one of the leading sites for bird watching, and he continues to provide support to bird programs throughout the world. Eco tourism around bird watching flourishes today throughout Israel and particularly in the Hula Valley.

Activity 1: Origami Birds and Paper Planes

1. Instruct $\frac{1}{3}$ of the class to create paper airplanes and $\frac{2}{3}$ of the class to create origami birds.

For instructions on creating airplanes and birds:

- <http://www.origami-instructions.com/paper-airplanes.html>
- <http://www.origami-instructions.com/origami-bird.html>
- <http://www.origamiway.com/origami-birds.shtml>
- Printable step-by-step instructions: <http://www.origami-fun.com/origami-birds.html>

2. Create a map on the ground with different cities or areas of Israel. Provide each student with instructions on where they are “departing from” and “arriving to.” The students who were instructed to make origami birds should be grouped into one or two flocks.
3. Instruct the students to fly their birds or planes from the departure location to the arrival location at the same time. Ask: Did everyone arrive to the right place? Were there any collisions on the way? If so, who was knocked down (birds or planes)?
4. In groups of 4-5, ask students to develop and then present a plan for how they can share the airspace with one another, recognizing that we cannot change the departure times or air path of the birds. (Ideas: Planes can fly higher or lower than the birds. Planes can fly through different routes. Planes can fly at different times.)
5. After each group presents their ideas, allow them to test out the theories that they think will work best using the origami birds and paper airplanes. Compare and contrast models. Ask: Which one worked the best? How do you think Yossi figured out which model would keep people the safest?

Activity 2: Dioramas

Instruct each student to create a diorama that does one or more of the following:

- Depicts birds and planes sharing the airspace.
- Shows the migratory path of birds through Israel.
- Illustrates Yossi’s role in making the sky a safer place for birds and humans.



HANDS-ON LEARNING



1. Building bird feeders and bird houses:

- <http://tlc.howstuffworks.com/family/bird-feeders.htm>
- <http://www.pbs.org/parents/crafts-for-kids/bird-feeders/>
- http://web4.audubon.org/educate/educators/bird_feeders.html
- http://www.ehow.com/list_7535864_homemade-bird-houses-kids.html

2. NU Campaign: Students can create their own NU Campaign t-shirts featuring the Hoopoe or local bird. Beyond selling t-shirts, the NU Campaign team educates and raises awareness about featured causes and stories through presentations and seminars, social media campaigns and supporting student led initiatives on college campuses, schools and communities worldwide.



According to the Nu Campaign: "On the inside of every NU shirt, a unique message is printed directly opposite your HEART. This way, every time YOU wear your shirt, you feel inspired to carry it close to you and represent it out to the world!"

One cause that the NU Campaign supports is that of migrating birds. For more information, see:
<http://www.nucampaign.org/en/shop/Causes/Migrating-Birds.aspx>

3. Bird watching: Teach your students bird watching techniques.

- In North America:
<http://www.allaboutbirds.org/Page.aspx?pid=1189>
- In Israel: <http://www.israbirding.com>

4. “Go Bird” Game Instructions: *For 2 or more players*

- Pass out four cards to each player.
- Put the remaining cards in a pile in the center.
- One person begins the game by turning to another player and asking for a card that would match with the same bird category as one of their own. If they match the card, they continue their turn.
- If they do not match, they say “Go Bird” and pick a card from the top of the pile. The turn passes to the next player.
- After a player collects a set of four birds from the same category, they play the set face up in front of them. The player who completes the most sets is the winner.



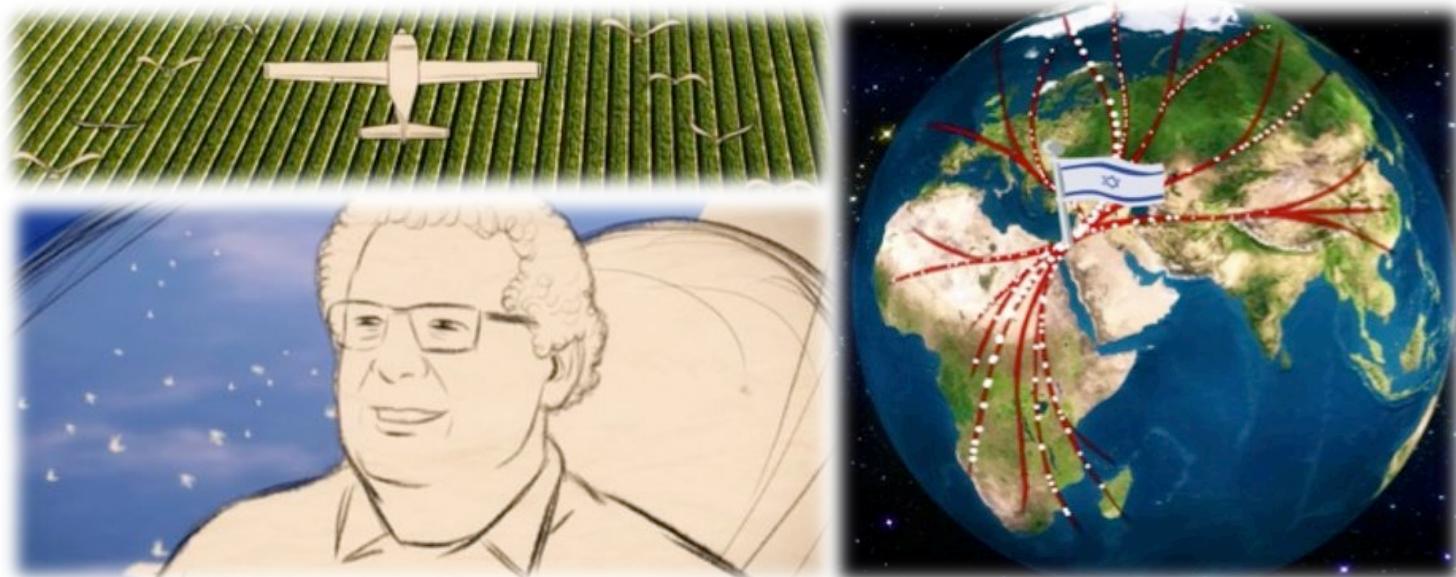
For the set of cards, please visit: http://www.birds.org.il/SIP_STORAGE/files/6/1996.pdf

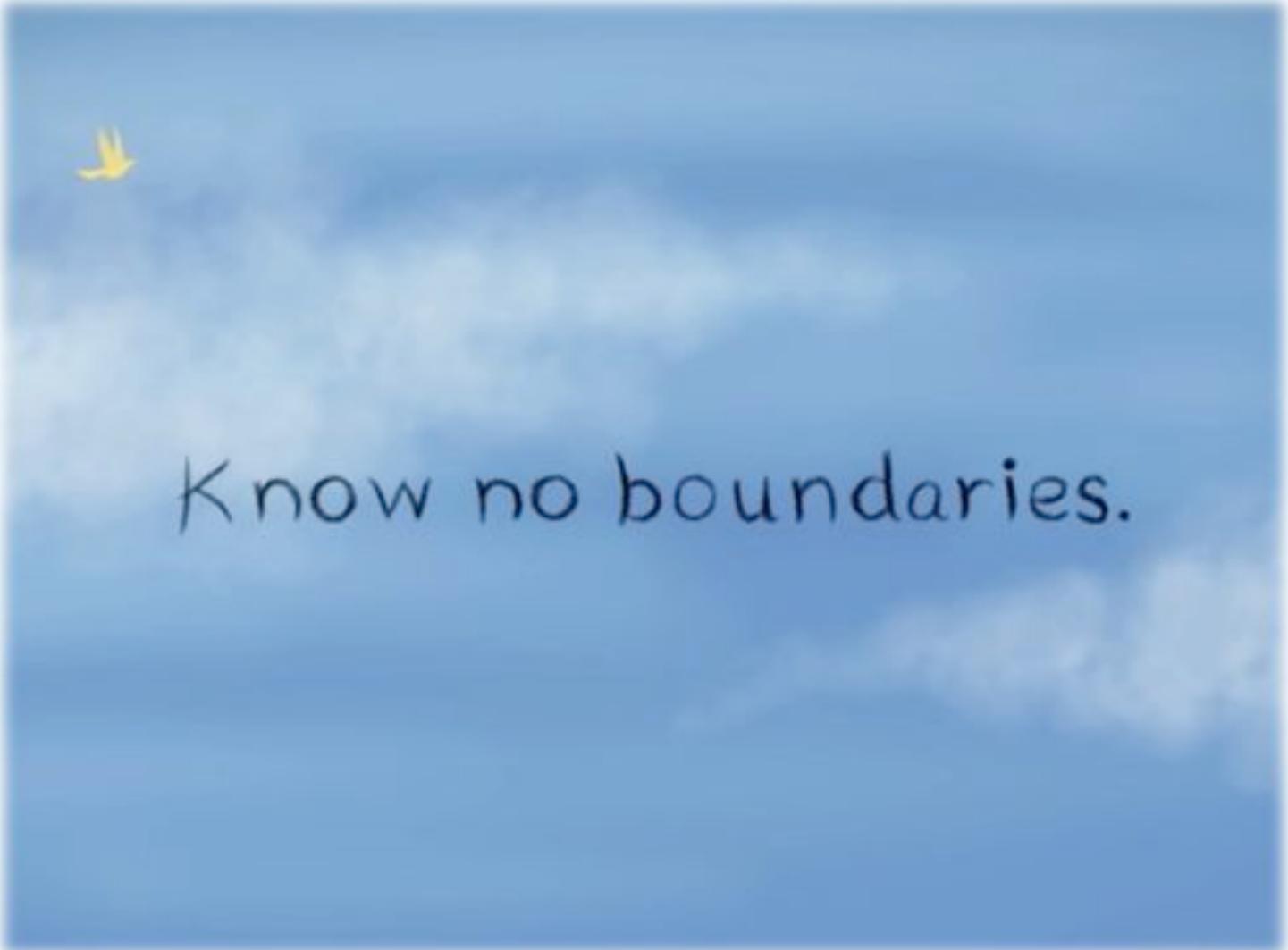
ADDITIONAL RESOURCES

1. An Orthodox rabbi saving the bird from extinction: <http://www.tabletmag.com/jewish-life-and-religion/123100/eat-this-endangered-species>
2. Film: Fly Away Home
3. Captain Sully Sullivan <http://www.youtube.com/watch?v=ih5CPeKI-Ds>
4. Free lesson plans on birds <http://www.theteachersguide.com/birds.htm>
5. Birding newsletter, with Yossi: http://birds.org.il/SIP_STORAGE/FILES/4/2554.pdf

ISRAEL21c Resources

1. “Fourth-graders flock together in new bird program.” ‘Yes to Birds’ gets thousands of Israeli Jewish and Arab schoolchildren outdoors to learn together. The program provides written and audiovisual material for a dozen 90-minute sessions concerning “birds in our backyard”: <http://israel21c.org/social-action-2/fourth-graders-flock-together-in-new-bird-program/>
2. “The Israeli who flies with the birds.” This article connects the story of the US Airways plane that landed in the Hudson in 2009 to the story of Yossi Leshem: <http://israel21c.org/people/the-israeli-who-flies-with-the-birds/>
3. “The top 10 environmentalists helping out Israel.” Yossi is listed as #1: <http://israel21c.org/environment/the-top-10-environmentalists-helping-green-israel/>
4. “Israeli bird expert develops early-warning system for avian flu.” The article describes Yossi’s research and the process of watching for signs of the virus: <http://israel21c.org/technology/israeli-bird-expert-develops-early-warning-system-for-avian-flu/>
5. “Israel’s Pied Piper leads barn owls from Tel Aviv to San Francisco.” In an effort to control the rodent populations in major cities, Yossi is transporting more families of owls across borders: <http://israel21c.org/social-action-2/israels-pied-piper-leads-barn-owls-from-tel-aviv-to-san-francisco/>
6. “Birds of a feather flock to Israel.” Bird watchers migrate to Israel. An overview of the story that inspired the iMMERSE video: <http://israel21c.org/environment/birds-of-a-feather-flock-to-israel/>
7. “Environmental concerns bring Israelis, Jordanians, and Palestinians together.” <http://israel21c.org/social-action-2/environmental-concerns-bring-israelis-jordanians-and-palestinians-together/>
8. Birds and the Hula Valley: <http://israel21c.org/travel/taking-wing-at-the-largest-flyway-in-the-world/>





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