

FROM SEED TO SEED

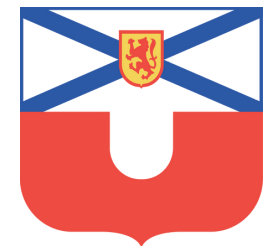
CURRICULUM RESOURCE



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Mrs. Krista LeBlanc

IB Biology HL
Biology 11/12
Food Science 12

FROM SEED TO SEED

A DOCUMENTARY BY KATHARINA STIEFFENHOFER

2017 | CANADA | 87 MINUTES | [TRAILER](http://fromseedtoseed.com/#trailer) (<http://fromseedtoseed.com/#trailer>)

TEACHER'S GUIDE

This curriculum resource will guide teachers and students to enrich their viewing experience of the documentary film *From Seed to Seed*. This resource is designed to help teachers frame discussions with their class, with classroom viewing activities for the film as well as an assignment relating to the themes of the film that can be completed after viewing.

ABOUT THE FILM

From Seed to Seed is a feature-length documentary about the growing momentum of regenerative agriculture, a blend of small and large scale farmers, cutting edge science with age old traditions, and fascinating folks.

Terry Mierau and Monique Scholte—the heart and soul of this film—gave up a life as opera singers in Europe to fulfill their passion for ecological, small-scale farming. Terry, Monique, and their three young children live in a house barn in the traditional single street Village of Neugberthal, in Southern Manitoba. They are equally determined to grow healthy food, a healthy family, and community vitality in the process.

At its core, this film is a celebration of all farmers, the return to Natural Systems Agriculture, and the people who are part of this slow and steady revolution. By providing a Canadian perspective, this film highlights the global social movement toward the regeneration of the land, farming, and communities for a healthier and truly sustainable future for all of us.

Source: <http://fromseedtoseed.com/about>

ABOUT THE FILMMAKER

Katharina Stieffenhofer is a Winnipeg documentary filmmaker with a passion for ecological agriculture, healthy communities and social justice.

Her love of Nature and appreciation of farmers is rooted in her childhood & youth growing up on a mixed family farm on a Rhine island in Germany and expanded when her parents immigrated to Canada to become grain farmers in Southern Manitoba.

Source: <https://filmfreeway.com/katharina.stieffenhofer.566>



SCIENCE 7 FROM THE RENEWED NS CURRICULUM SCIENCE 7 GUIDE

OUTCOME STATEMENT
Learners will implement an environmental stewardship plan
Students will analyse the interconnectedness of biotic and abiotic components in nature, inclusive of Mi'kmaq perspective

SCIENCE 10 STUDENTS WILL BE EXPECTED TO...

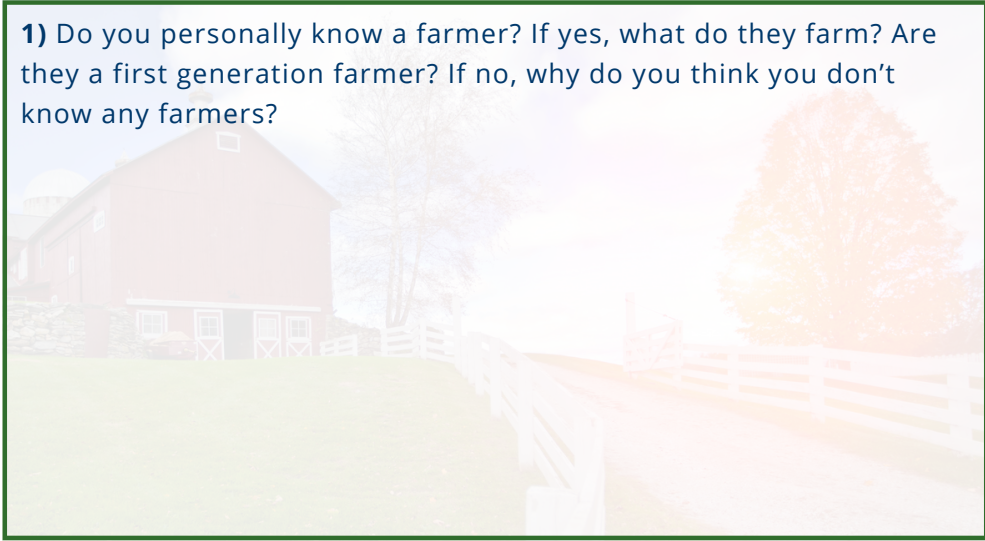
OUTCOME #	OUTCOME STATEMENT
114-1	<ul style="list-style-type: none"> Question and analyze how a paradigm shift in sustainability can change society's views
318-2, 318-5	<ul style="list-style-type: none"> Distinguish between biotic and abiotic factors, determining the impact on the consumers at all trophic levels due to bioaccumulation, variability, and diversity
214-1, 318-6	<ul style="list-style-type: none"> Describe how the classification involved in the biodiversity of an ecosystem is responsible for its sustainability
212-4, 214-3, 331-6	<ul style="list-style-type: none"> Predict and analyze the impact of external factors on the sustainability of an ecosystem, using a variety of formats
213-7, 215-1, 318-4	<ul style="list-style-type: none"> Diagnose and report the ecosystem's response to short-term stress and long-term change
331-7, 318-3	<ul style="list-style-type: none"> Describe how different geographical locations can sustain similar ecosystems
118-9, 215-4, 118-5	<ul style="list-style-type: none"> Identify, investigate, and defend a course of action on a multi-perspective social issue
114-5, 116-1, 117-3, 118-1	<ul style="list-style-type: none"> Identify and describe peer review, Canadian research, and global projects where science and technology affect sustainable development

BIOLOGY 11 STUDENTS WILL BE EXPECTED TO...

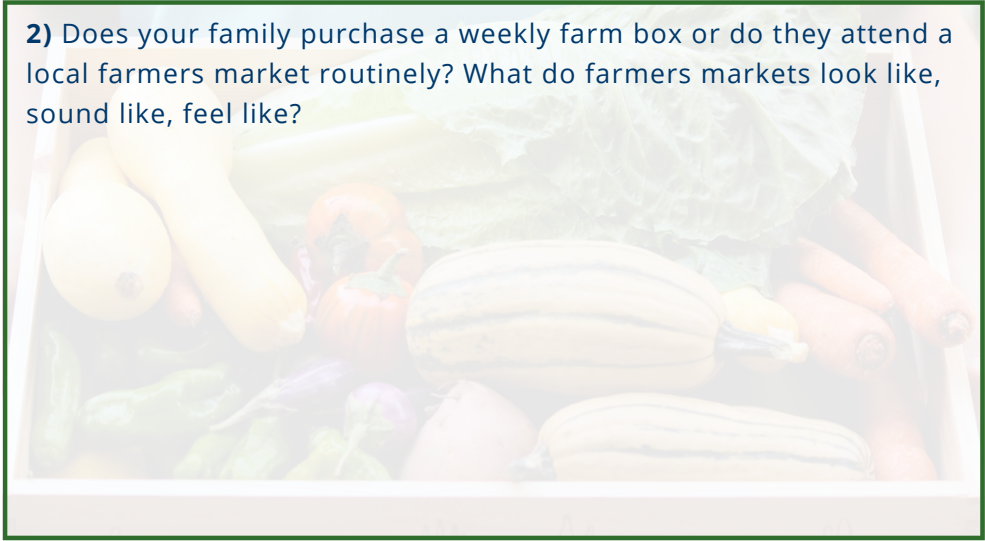
UNIT	OUTCOME STATEMENT
Classifying Living Things	<ul style="list-style-type: none"> Analyze and describe examples where scientific knowledge evolved, was enhanced, or revised as a result of new laws, theories, and/or technologies (115-7, 116-2)
Diversity Amongst Living Things	<ul style="list-style-type: none"> Construct arguments to support a decision or judgment, using examples and evidence, recognizing various perspectives (118-6) Describe the anatomy and physiology of a representative organism from each kingdom, including a representative virus (316-6)

Prior to viewing the film, please take a moment to answer the following questions:

1) Do you personally know a farmer? If yes, what do they farm? Are they a first generation farmer? If no, why do you think you don't know any farmers?



2) Does your family purchase a weekly farm box or do they attend a local farmers market routinely? What do farmers markets look like, sound like, feel like?



VIEWING QUESTIONS:

1) Why was Terry told that he could never be a farmer?

2) What type of farming was Terry introduced to, to counter conventional farming?

3) Why were Manitoba house barns of interest for Terry and Monique? Why type of crops do Terry and Monique produce at their home?

4) What is seed security? Why is it important for farmers to take seed responsibility back? What is farmer participatory plant breeding?



5) Do you think that plant genetics belong to “the people” or “to companies”? Why should farmers be participants in the plant breeding program through Manitoba University?

6) About 6 minutes into the film we meet Dr. Martin Entz, a professor of Natural Systems Agriculture at the University of Manitoba. Dr. Entz says it is important for conventional farmers to consider converting a portion of their land to organic farming. What knowledge can come from conventional farming/organic farming methods? Why is this knowledge important as the climate is becoming increasingly more variable?



7) What is a seed library? Why does Monique love participating in Seedy Saturday?

8) What is the appeal for Terry to be an artist/singer and also to be a farmer? What lens does Terry bring to the view of farming?

9) In the film, we learn a lot about the importance of soil health. Terry says “the soil needs to be alive, for the plant fertility to come”. Why is soil health important for all farmers? How does this new knowledge connect to nutrient cycles you have learned about in Science class?



10) Why is agriculture such an important place for people to engage with growing food and practice their skills of sustainability?



11) Why is organic farming more proactive compared to conventional farming methods?

12) What is a CSA?

13) What does “farmer sustainability” mean? Are you already considering your wellness when it comes to selecting an occupation?

14) Do you agree with Monique that farmers are scientists? What do you think about the power of observation?

15) What skills are required to be a farmer?

16) The average canadian farmer is 55 years old. We have lost 60% of Canadian farmers, and we are currently on an alarming path to losing many farms. Why do you think many people don't want to be farmers? Do you want to be a farmer? Support your answer.



17) How does climate affect farming? How do farmers feel a sense of security by establishing close community ties with climate crisis looming?



18) What is a cover crop or pough down crop? What does this biomass do to slow climate change?

19) Why is systems thinking so important when organic farming?

20) Why are adaptability and versatility so important to crop farmers in the coming decades?

21) Why do we need incentives to get young folks interested in farming?

22) What are the lasting effects of Roundup® in the soil?

23) Why is variety important in seed quality for farmers?

POST-VIEWING QUESTIONS:

1) Terry ends the film stating that farming is a constant battle between the emotions of hope and despair. Now that the film is ending are you hopeful or full of despair for what the future of farming holds?

2) *From Seed to Seed* really focuses on relationships. With a partner, reflect on the types of relationships that are mentioned below:

Relationships	Evidence/Story
Farmer to Land	
Farmer to Animal	
Soil to Plants	
Plants to Animals	
Farmer to University	
Farmer to Community	

CHOICE ACTIVITY!

1) What questions do you now have that you have met Terry and Monique? Take a moment to sit in a small group and develop questions that you would like to ask you local farmer or grocery store owner. After you have made a list of questions that you would like to ask, draft a simple letter to a local famer.

Questions:



2) From Seed to Seed emphasizes the importance of supporting local farms and CSAs. With provided art materials from your teacher, please make a poster to tell other community members about the importance of purchasing locally available produce.

Use this space to brainstorm or sketch ideas for your poster:

