

What should we do?

Making nature-culture relations over time.

There are many time scales that make a place what is today, and what it could be in the future. These time scales (a place's histories) span across land, plants, animals, and human communities over time. In this activity you will explore how your own decisions have multiple impacts and intersect with different timescales. First you will practice thinking about how one or more of your decisions have multiple impacts and are connected to other things. Then you will explore how these layered impacts connect to different scales of time. Fill out as much of the chart as you want. There are no right or wrong answers!

Part 1: Mapping your decisions: What are the impacts?

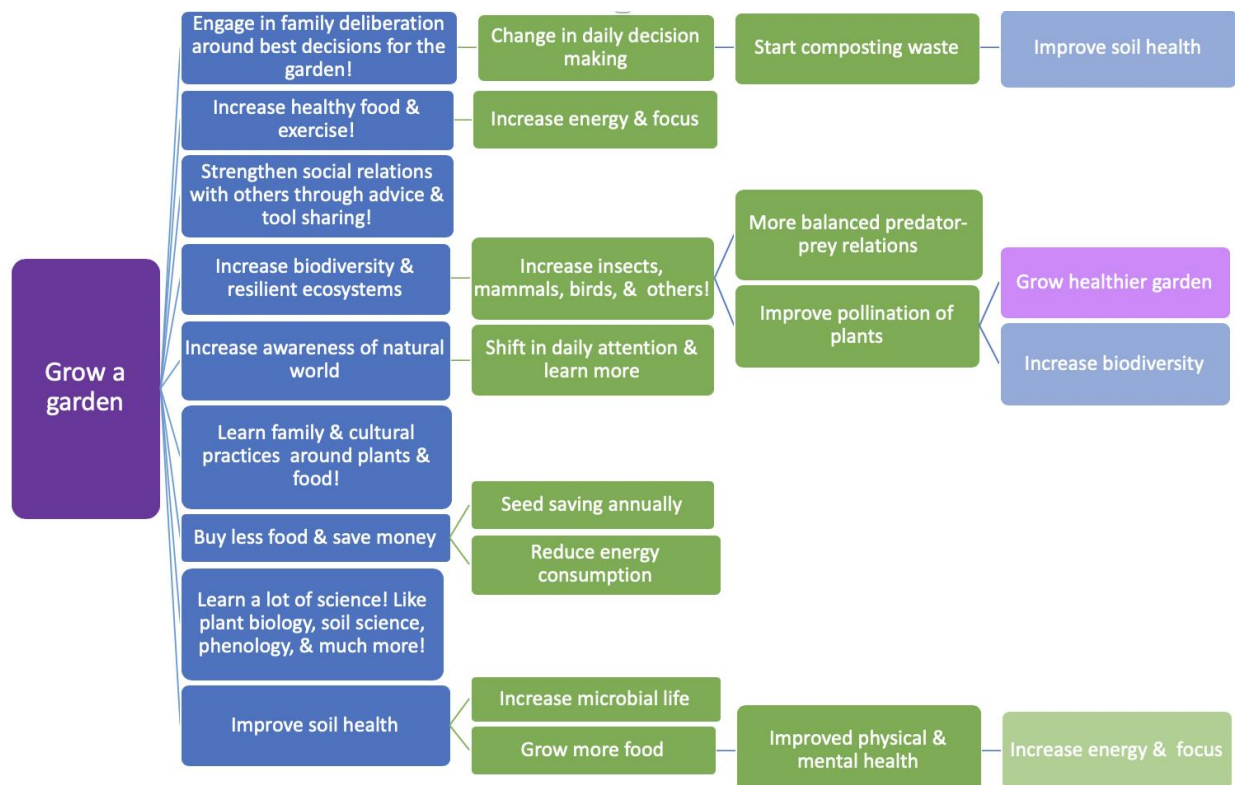
Start out by identifying a key decision. Then you should “map” what are called primary and secondary impacts of your decision. **Primary impacts are the first layer of impacts from your decision.** They are the immediate things that are changed. Usually when we make a decision we think about primary impacts. However, sometimes we only focus on a few primary impacts and forget to think about the full scope of impacts - especially those in the natural world. **Secondary impacts aren't directly from your decision but rather emerge in response to the primary impacts.** There are tertiary impacts and further down the line. For this activity we are going to collapse all of the **indirectly emergent impacts** into the secondary category. Sometimes we think about secondary impacts when making decisions and sometimes we don't. This activity is intended to help your family consider and talk about secondary impacts. Finally, you will also consider feedback loops with respect to your decisions. **In ecosystems feedback loops describe how a change or decision in one part of a system impacts another part of the system and then how this change then causes feeds back to affect the original decision or phenomena.** These feedback loops can be positive or negative and create some of the basic regulatory dynamics of ecosystems. **PLEASE SEE THE INCLUDED EXAMPLE TO GET AN IDEA OF HOW THIS CAN WORK!** This activity is intended to help you think about these decisional dynamics and then consider how they intersect with different time scales. Different time scales are often changed by a complex interaction of primary and secondary impacts and the feedback loops that emerge.

Part 2: Mapping your decisions to scales of time.

Utilizing the second activity sheet to explore how your decision is connected to different scales of time. You likely already named some ways in part 1 of the activity so use that to help reflect in part 2. You will note that the activity sheet expects that you will wonder or have questions about each time scale. It is intended to help you wonder about it and to help motivate interest and the need to learn more. LE's 6-9 help do that!

Part 1: Mapping your decision: Should we grow a garden? What will the impacts be?

Below is an example of a decision map around growing a garden. This decision map isn't complete but will give you an idea of the many different dimensions involved with deciding to grow a garden! The example below has the decision in the darker purple box, the primary impacts of growing a garden in the darker blue boxes, the secondary impacts of growing a garden are in the darker green boxes and the feedback loops are in the lighter blue, purple, and green boxes.



Part 2: Mapping your decisions to scales of time.

You explored how places and societal structures shape your family decisions in previous learning engagements. This is also true at the different time scales that make a place what is today, and what it could be in the future. These time scales (a place's histories) span across land, plants, animals, and human communities. In this activity explore how your decision intersects with different timescales. Utilize your decision map to fill in as much as you can. You can also explore new potential impacts of your decision. You may not know, that is ok. If you aren't sure see if you can imagine some ways it might. You can use the table below, rewrite it for yourself, or you can just talk about each of these dimensions. If you think of new impacts of your decision using the different scales of time add them to your decision map! Also note this activity connects to LE 1.C.

What is your family's decision?		
Time Scales	How did your decision have impacts with each time scale?	What questions or wondering do you have about whether your decision has impacts at this time scale?
Geologic Time: Land and ocean processes, mountain formation, glaciation, etc.		
Plant, Animal, and Soil Time: Plants, animals, and soils of the area, species extinctions or adaptations		
Indigenous Peoples' Time: Recognizing First Peoples and their histories and current relationships to this place		
Nation State Time: How the development of nations over time has shaped and impacted this place		
Global Time: How this place is connected to, impacts, or is impacted by other places across the earth and interacts with other time scales		
Living Ethical Responsibilities and Possibilities Time: What's possible for this place?		