

EAP: Ecological Issues Keywords 2

Megafire

Noun

<https://youtu.be/BmhnkT9V6Uk>



Until we, the owners of public lands, make it our high priority to do something about the current situation, we're going to experience losses to megafires.

- Paul Hessberg

Megafire | noun

A megafire is a wildfire that is over 2,500 acres big

EXAMPLES

A megafire is a very big wildfire.

A megafire can cause a lot of damage and loss.

The only way to prevent another megafire is to have a prescribed burn.

The megafire started after a lightning storm.

The community was wiped out by the megafire, there was nothing they could do.

In 1988 there was a megafire in Yellowstone National Park that burned 36% of the forest.

1. What can we do to prevent megafires?
2. Have you ever seen a megafire?
3. How big is a megafire?



ADDITIONAL LINKS

<https://www.nationalgeographic.org/encyclopedia/megafire/>

Wildfire

Noun

https://youtu.be/apOLaiS_dE



In 1910, we had a huge wildfire. It was the size of the state of Connecticut. We called it the Big Burn.

- Paul Hessberg

Wildfire | noun

A raging, rapidly spreading fire

A fire that spreads quickly in the wild

EXAMPLES

Wildfires can be extremely dangerous if they get out of control

Most wildfires in 2020 are actually caused by lightening.

If you start a wildfire in BC, you might have to pay for the damages

The campers did not put out the campfire. It spread and caused a giant wildfire.

10,000 houses were destroyed in the wildfire.

1. How can we prevent wildfires from starting?
2. Have you ever seen a megafire?
3. How big is a megafire?



ADDITIONAL LINKS

<https://www.nationalgeographic.org/encyclopedia/wildfires/>

<https://www.nationalgeographic.org/media/2017-california-wildfires/>

https://www.who.int/health-topics/wildfires#tab=tab_1

<https://www2.gov.bc.ca/gov/content/safety/wildfire-status/about-bcws/wildfire-response/fire-characteristics/causes>

Landscape

Noun

<https://youtu.be/hsD5vbFECOU>



For 10,000 years, Native Americans lived on this landscape, and they intentionally burned it - a lot.

- Paul Hessberg

Landscape | noun

A landscape is an area of land that can be seen at one time

EXAMPLES

Canada has beautiful landscape with lots of mountains and lakes

I grew up in Ireland, my town is famous for its beautiful landscape

Native Americans knew how to take care of the landscape, we should listen to them more

Lots of wild animals roam the landscapes of North America

In the west of Ireland, the landscape is very rocky

1. Does your country have nice landscape?
2. What is the landscape like in your country?
3. What is your favorite type of landscape?



ADDITIONAL LINKS

<https://www.nationalgeographic.org/encyclopedia/landscape/>

https://www.youtube.com/watch?v=iCyLL2s0-vU&ab_channel=AlexInselberg

https://www.youtube.com/watch?v=m76ighn8mKM&ab_channel=RT%C3%89-IRELAND%E2%80%99SNATIONALPUBLICSERVICEMEDIA

Avoid

Verb

<https://youtu.be/kHWREhZENB4>



And most importantly, they figured out if they burned in the spring and the fall, they could avoid the out-of-control fires of summer.

- Paul Hessberg

Avoid | verb

To keep away

To prevent something from happening

To not do something

EXAMPLES

We really need to avoid wildfires, if we are not careful, they will develop into megafires.

By having prescribed burns, we can avoid an out of control wildfire

The first nations of the Okanagan avoided major wildfires by creating smaller controllable wildfires

You should avoid building your house in that area, it's prone to flooding.

We should avoid using single use plastic if we want to keep our country clean



1. How can we avoid natural disasters like flooding or earthquakes from destroying our towns and cities?
2. What is the best way to avoid a megafire?
3. Is there anything you can do locally to avoid pollution?

ADDITIONAL LINKS

<https://www.merriam-webster.com/dictionary/avoid>

<https://thewire.in/government/environment-impact-assessment>

Severe

Adjective

<https://youtu.be/fNaXzyOJG58>



Fires were frequent here, and when they occurred, they weren't that severe, while further up the mountain, in the moist and the cold forests, trees were more densely grown and fires were less frequent, but when they occurred, they were quite a bit more severe

- Paul Hessberg

Severe | adjective

Intense

Extremely powerful

Very strict or harsh

EXAMPLES

There is a severe wind warning in the Okanagan valley, wind will get up to 100 km/hr

The heavy rain caused a severe flood

There is a severe hurricane warning in effect for Florida

That wildfire was severe

The child had a severe temperature and was rushed to hospital



1. What are some severe ecological issues in your country?
2. What can be done to prevent severe climate change from occurring?
3. What should you do if you have a severe headache?

ADDITIONAL LINKS

https://www.youtube.com/watch?v=wSXvcveNSTQ&ab_channel=TornadoTrackers

<https://www.theweathernetwork.com/ca/news/article/british-columbia-set-for-cold-est-temperatures-this-century>

Manage

Verb

<https://youtu.be/rDjpMFXG0cc>



So it's up to us. We can spread this message to our lawmakers, folks who can help us manage our fires and our forests.

- Paul Hessberg

Manage | verb

To control something

To control the use of something

EXAMPLES

We need to manage our wildfires better, they are getting out of control

We need better fire management

The First Nations of the Okanagan were able to manage fires better than what we do today



1. How did your country manage covid-19?
2. In Canada, we can manage life with snow very well, what about your country?
3. How can we manage our wildfires better?

ADDITIONAL LINKS

<https://www.nrcan.gc.ca/our-natural-resources/forests-forestry/wildland-fires-in-sects-disturban/forest-fires/fire-management/13157>

<https://www.fs.usda.gov/science-technology/fire>

Prescribed Burn

Noun

https://youtu.be/TJqnn-fL_30



Let's look at some of the tools. We can use prescribed burning to intentionally thin out trees and burn up dead fuels.

- Paul Hessberg

Prescribed burn | noun

A planned and controlled fire

A thought out intentional burn of a certain area of land.

EXAMPLES

The first nations of the Okanagan valley had their own prescribed burns, they had a good relationship with wildfires.

In 1910, the state of California made prescribed burns illegal. This eventually had terrible consequences. In 2020 the state of California made prescribed burns mandatory.

If we had more prescribed burns, we would not have such damaging wildfires.

The best time to have a prescribed burn is not in the middle of summer, either before or after summer.

Native Americans regularly had prescribed burns, there are many benefits to prescribed burns.



1. Do you think prescribed burns are good or bad?
2. Why do you think prescribed burns are beneficial for nature?

ADDITIONAL LINKS

<https://www2.gov.bc.ca/gov/content/safety/wildfire-status/prevention/vegetation-and-fuel-management/prescribed-burning>

<https://www.nationalgeographic.org/encyclopedia/controlled-burning/>

Acre



Noun

<https://youtu.be/K0H2DmALi6U>

We called it “the Big Burn.” It stretched from eastern Washington to western Montana, and it burned, in a few days, three million acres, devoured several towns, and it killed 87 people. Most of them were firefighters.

- Paul Hessberg

Acre | noun

An area of land

1 acre is 4,047 square meters

EXAMPLES

The small wildfire destroyed 60 acres of land

An acre of land in northern BC is cheap

You can build about 18 hours on an acre of land

An American football field is about 1.32 acres in size.

The megafire destroyed acres of land and caused millions of dollars of damage

1. How much does an acre of land in your hometown/city cost?



ADDITIONAL LINKS

https://www.youtube.com/watch?v=rXXGE1Ykqpg&ab_channel=Raydient-Places%2BProperties

Area

Noun

https://youtu.be/1Uj_sc9Bhxc



So when we do get a fire, large areas can literally go up in smoke.

- Paul Hessberg

Area | Noun

A region

A part of land

EXAMPLES

The wildfire burnt a huge area of land

We need to evacuate the area, the wildfire is out of control

An area of 160 acres was burnt by the wildfire

Kelowna is a nice area to live

We need to burn up the dead fuels in the forest to prevent the entire area from burning

Don't build your house there, that area floods every year



1. Can you describe the area that you live in?
2. What can you do to ensure your local area is environmentally friendly?

ADDITIONAL LINKS

https://www.youtube.com/watch?v=DK2xBGi8Gqc&ab_channel=NBCNews

https://www.youtube.com/watch?v=xkd3TE_wi5U&ab_channel=VOANews

Fuel

Noun

<https://youtu.be/3hCP1aNoKzs>



Let's look at some of the tools. We can use prescribed burning to intentionally thin out trees and burn up dead fuels.

- Paul Hessberg

Fuel | Noun

Something used to produce power

Something used to produce heat

A source of power

EXAMPLES

Because we have stopped wildfires so well in the past, trees did not burn. As a result, dead trees are now lying on the forest floor waiting to catch fire, they are fuels.

We need to have more controlled burns to take care of the dead fuels in the forests

What fuel does your car take, diesel or gasoline?

If we had more prescribed burns, we could burn all the fuels on the forest floor and prevent a megafire from starting.

In order for a wildfire to happen, it needs fuel. Dead trees are an example of fuels that can make a wildfire spread.



1. What fuel does your car take?
2. What fuel is environmentally friendly?

ADDITIONAL LINKS

https://www.youtube.com/watch?v=AvhC4z4w3G0&t=72s&ab_channel=WorldofWildlandFire

https://www.youtube.com/watch?v=EA3nXYAqF5s&ab_channel=WorldofWildlandFire

https://www.youtube.com/watch?v=8uureUIGbfs&ab_channel=UW%28UniversityofWashington%29

Occur

Verb

<https://youtu.be/AZ80JKDugWQ>



Fires were frequent here, and when they occurred, they weren't that severe, while further up the mountain, in the moist and the cold forests, trees were more densely grown and fires were less frequent, but when they occurred, they were quite a bit more severe

- Paul Hessberg

Occur | verb

To happen

To take place

EXAMPLES

A wildfire occurred after the storm

If we want to stop megafires from occurring, we need to have more prescribed burns

Natural wildfires do occur, but man-made wildfires occur a lot more.

In the past, when wildfires occurred, they were not as severe or dangerous as they are today.

There are many ways to prevent wildfires from occurring



1. How can we stop wildfires from occurring?
2. How can we prevent river contamination from occurring?

ADDITIONAL LINKS

<https://www.merriam-webster.com/dictionary/occur>

<https://www.thoughtco.com/when-and-where-do-wildfires-occur-3971236>

<https://www.nationalgeographic.com/environment/natural-disasters/wildfires/>

https://www.youtube.com/watch?v=EckJR6bkMdM&ab_channel=NAZToday

Logging

Noun

<https://youtu.be/NGAgG6wfkY>



So fires were unintentionally blocked by roads and railroads, the cattle and sheep ate the grass, then along comes fire suppression and logging, removing the big trees, and you know what happened? All these factors worked together to allow the forest to fill in, creating what I call the current epidemic of trees.

- Paul Hessberg

Logging | Noun

The activity or business of felling trees

The process of cutting and processing the timber.

EXAMPLES

Canada has a huge logging industry

Logging is a very big industry in Alberta, Canada.

Due to our logging practices of taking away the biggest trees, we have created a problem where the forests have filled in with very burnable smaller trees

It's crazy to think that by logging we are actually creating the grounds for a wildfire

Logging is not an easy field to work in.



1. What fuel does your car take?
2. What fuel is environmentally friendly?

ADDITIONAL LINKS

<https://dictionary.cambridge.org/dictionary/english/logging>

<https://globalforestatlas.yale.edu/forest-use-logging/logging>