



# CLIMAFACTS

MONTHLY NEWSLINE

## NEWSLINE

### MARCH

### How Much Methane Are Our Landfills Really Emitting?

**Author:** Sanuli Wijayasundara

**Date:** August 15, 2024

**Link to Blog Post:**

<https://climafacts.ca/how-much-methane-are-our-landfills-really-emitting/>

As Canada grapples with the urgent need to combat climate change, a hidden but significant culprit is making its mark: methane emissions from landfills. Researchers like Nadia Tarakki and Amirali Foomajd are on a mission to determine the extent of this gaseous menace. Their high-tech vehicle navigates the rugged terrain of disused landfills, tracking methane leaks that could impact national climate goals. With methane being much more potent than carbon dioxide over a century, understanding and accurately measuring these emissions is essential for shaping effective environmental policies and mitigating climate change.

#### INFORMATION AND SIGNIFICANCE

Nadia Tarakki and Amirali Foomajd, part of a dedicated team from the Flux Lab at St. Francis Xavier University, are using advanced technology to measure methane levels across the country. Their specialized equipment on their SUV meticulously tracked emissions from old and active landfills, providing crucial data for environmental policy.

Methane, a gas 25 times more effective at trapping heat than carbon dioxide, is a significant player in climate change despite its shorter atmospheric lifespan.

The Flux Lab's extensive research is aimed at improving the accuracy of Canada's methane emissions estimates, which are vital for meeting international climate targets. By visiting diverse landfill sites, such as at St. John's, the team is benchmarking emissions and guiding future regulations.

Their findings reveal that while Canada's cold climate helps reduce methane production, landfills will continue to emit gas for decades due to the decomposing waste of the past. This insight is shaping new federal regulations designed to enhance methane capture and reduction efforts. As Canada moves forward with these regulations, the research conducted by Tarakki, Foomajd, and their colleagues may play a pivotal role in mitigating the environmental impact of landfills and advancing climate action.



#### CONCLUSION

As Canada seeks to meet its climate goals, the data gathered by these researchers will inform more effective regulations and mitigation strategies. However, this is just the beginning. To make an impact, it's essential for policymakers, businesses, and individuals to support and advocate for advanced methane capture technologies and stricter environmental regulations. Together, we can help drive the transition to a cleaner, more sustainable future.

To learn more and read the full article, visit our website Blog Page.



# Acid Rain & Effect on Soil Acidity

**Author:** Abby Marsden  
**Date:** August 11th, 2024  
**Link to Blog Post:**  
<https://climafacts.ca/acid-rain-effect-on-soil-acidity/>

Acid rain, a byproduct of air pollution, poses potential risks to various ecosystems, including agricultural land. Eastern Canada, well known for its productive agricultural regions, faces specific challenges due to acid rain, which can influence soil health and crop productivity.

The research conducted by Coote et al. aimed to assess the impact of acid rain on agricultural soils and crops in Eastern Canada, with a focus on understanding soil sensitivity and potential plant damage. Given the importance of agriculture in regions like the Great Lakes, St. Lawrence lowlands, and Atlantic areas, this study aims to address a large concern held by those impacted by the harmful rain.



To do this, the researchers categorized soils into three sensitivity classes – sensitive, moderately sensitive, and non-sensitive – based on the depletion of exchangeable bases in the soil over 25 years of acid rain. Further, the study explored the direct and indirect effects of acid rain on crops, highlighting the potential risks from soil acidification and the presence of sulfur dioxide in the air. The research overall advances information gathered in previous studies by providing a detailed assessment of soil sensitivity and the effects of acid rain on agricultural systems.

To learn more and read the full article, visit our website Blog Page.

# Fish of Atlantic Canada



A E H S I F D E R R K U  
C O H E H A K E R H E F  
O S S W O H L A E S K L  
R F W H T Y A I H H A A  
E I I O A D S A A S H L  
T S U R R L D T K W R E  
S H D C O D I H E O E W  
B V F F O E F B Y R V I  
O E E C H L V I U L L F  
L W K V H F S L S T I E  
E K A H E T I H W H S H  
Y T E D I S R E V L I S

## Word Bank

-Cod  
-Haddock  
-Halibut

-White hake  
-Silver hake  
-Redfish

-Swordfish  
-Alewife  
-Siverside

-Lobster  
-Oyster  
-Seal

## Atlantic Canadian Premiers talk about Climate Change

**Author:** Sarah Norman  
**Date:** July 27, 2024  
**Link to Blog Post:**  
<https://climafacts.ca/atlantic-canadian-premiers-talk-about-climate-change/>

In Halifax, Nova Scotia, the premiers of Canada gathered to discuss the various problems facing their provinces and territories. Among the topics discussed was climate change. Climate change refers to changes in weather trends worldwide, and many of the changes we are currently going through are human-caused. This has various negative impacts: heat waves and wildfires, stronger hurricane seasons, and rising seas, among other effects.



The article is a political event summary. It describes how though many other things were discussed, climate change stayed consistently in the hall. It delves into the specifics of what was stated.

To learn more and read the full article, visit our website Blog Page.





**Maritime Grain Farmers Get \$4.3M Boost to Tackle Climate Change**

**Author:** Sanuli Wijayasundara

**Date:** August 17, 2024

**Link to Blog Post:**

<https://climafacts.ca/maritime-grain-farmers-get-4-3m-boost-to-tackle-climate-change/>

To support Maritime farmers in the face of unpredictable weather due to climate change, federal and provincial governments have announced a large investment in regional agricultural research. Unveiled in Charlottetown, this funding will be allocated to the Atlantic Grains Council over the next five years, aimed at developing crops resilient to the changing climate. This local research is crucial for adapting to conditions like the heavy rains from Hurricane Beryl. With support from the government, this initiative strives to integrate environmental science into farming practices to ensure sustainable grain production in Atlantic Canada.

**INFORMATION AND SIGNIFICANCE**

Grain farmers in the Maritimes received a much-needed boost as federal and provincial governments announced a \$4.3 million funding initiative for agricultural research. The Atlantic Grains Council will benefit from this investment over the next five years, with the goal of developing crop varieties better suited to the region’s changing climate.

Council chair Roy Culberson highlighted the urgency of this research, citing the recent heavy rains from Hurricane Beryl as a stark example of the challenges faced by farmers. Culberson emphasized the need for locally focused research to determine which crops perform best under the specific conditions of the Maritimes. This funding aims to provide farmers with the tools and knowledge necessary to adapt and thrive in the face of unpredictable weather.

Malpeque MP Heath MacDonald underscored the importance of integrating scientific research into farming practices to address the impacts of climate change. The \$4.3 million initiative, which includes a \$1.25 million contribution from the Maritime provinces, not only supports grain farmers but also benefits the broader agricultural community. By investing in local research, the program aims to enhance crop resilience, ensuring a sustainable future for grain production in Atlantic Canada.

**CONCLUSION**

The multimillion dollar investment in agricultural research represents a key step in helping Maritime grain farmers face the evolving challenges of climate change. By focusing on local conditions and developing resilient crop varieties, this initiative not only supports grain production but also strengthens the agricultural sector in Atlantic Canada. Farmers, researchers, and community members must work together to leverage these advancements, ensuring that local agriculture can adapt and thrive.

To learn more and read the full article, visit our website Blog Page.

