

Why is the Central Experimental Farm Important to You?

On November 3rd 2014, the National Capital Commission announced that 60 acres of the Central Experimental Farm are slated to be converted into a new campus for The Ottawa Hospital. For many Ottawa citizens, this news is long overdue. It is easy to see how society can benefit from a new medical facility and there is no argument against that. The key question is not whether the new facility should be built, but whether it has to be on the Central Experimental Farm.

Understanding decades worth of scientific work conducted on the Central Experimental Farm would be a daunting task. After all, the scientists working on it have dedicated their entire lives to the research. So here is a simple breakdown on why the Central Experimental Farm should be important to you.

First, it is important to understand that soil research operates on a different time scale. In an interview, Dr. Clarke Topp, an internationally acclaimed soil physicist, describes the soil as a source of life and how it is undervalued by many. The soil is the very fabric that life is built upon and it is very responsive to the environment, making it fragile and vulnerable to our actions. But soil, like any other form of nature, also exhibits a strong resilience to rebuild in the long term. To put things into perspective, an inch of soil can take 500 to 1000 years to form. Comparing that to the time it takes to degrade the soil, it is obvious that the time scales are very much imbalanced. Currently, Field No. 1, the major part of the proposed 60 acres, holds more than 100 years of experimental information. The loss of this field would be equivalent to destroying the very source of all information.

Soil has always been a synonym for dirt. Hence, it may be difficult to imagine the importance of soil, much less the importance of these research plots to the non-scientific community. The Central Experimental Farm has contributed significantly to Canada's agriculture. The commercial farming of major crops, particularly soy bean production is vital to Canada's economy. According to Ontario's Ministry of Agriculture, Food and Rural Affairs, in 2013, the total farm value of soybeans was approximately \$1.63 billion, only second to that of grain corn. Research done on the experimental farm was a significant factor in the development of varieties of these crops suitable for the Canadian environment. Such research is not simply to satisfy the curiosity of the scientific community but has significant positive impacts for the everyday citizen as well. Therefore, it is important that our plans recognise such contributions and will not undo their impact.

The work on Field No. 1 not only contributes to the scientific community in Canada but has been part of a larger worldwide study that contributed to reports by the International Panel on Climate Change which won the Nobel Peace Prize in 2007. Soil is basically a carbon sink. The work on the Farm plays a key role in looking at how we can protect carbon in the soil and prevent the loss of productivity. Without this research plot, Canada's role in conducting effective research to tie into the international project will be compromised.

The Central Experimental Farm has proven itself to be important and relevant not only to the scientific community but to all citizens. The farm is more than just another set of research plots. It is a representation of how science can contribute to the country and place Canada on the international map. As Dr. Topp mentioned, we can do anything we want if we can engineer it properly but soil is not a product of engineering. It ties to the whole environmental system. So soil and the Central Experimental Farm are pretty important and should be kept intact.

Qin Xuan Chua

Qin Xuan Chua is a third year Environmental Sciences exchange student at the University of Ottawa, visiting from Singapore. She accepted an invitation by the Greenspace Alliance of Canada's Capital to interview Dr. Topp.