

Final questions:

How do the processes of airplanes affect the environment?

What role does the biome play in plane construction?

What natural resources are required for plane construction?

What environmental lessons did we learn through aviation in Tompkins County?

By the turn of the 20th century, the movement of people across the landscape was becoming increasingly more common and prevalent in daily society. In 1903, the Wright brothers had their first successful flight, and soon, air travel changed the way humans traversed the globe. While a new mode of transportation came with the benefits of navigating over rough terrain and crossing bodies of water, it was not without a cost as airports began to pop up throughout the country. In Tompkins County, New York and beyond aviation came at the cost of the environment. Our presentation argues that the increased reliance on air travel has increased the desire for human control over nature and negatively impacted the surrounding ecosystems.

With the development of air travel came the development of airports, and it has become the role of airports to serve as the welcome center for people traveling to that area, and because of that, airport agencies have constantly sought to improve for the next best thing to entice new flyers. In Tompkins County, the first airport was located on the inlet to the west of Cayuga Lake, but not at no cost to the environment. We found that the land had to be cleared of all vegetation to make way for a runway, and silt was introduced to the land in an attempt to control the natural water table. When the hills of the valley made landing more difficult and larger infrastructure was needed to support travelers, a new airport was constructed in Lansing, New York. However, the Lansing airport had continued struggles. The airport had to avoid building on wetlands because of orders from the Army Corps. They started using de-icing fluid to prevent freezing runways, and soon they started changing the size of planes, the number of trips, and destinations.

As Aviation flies into the 21st century, federal agencies have determined regulations in planning and fulfilling the construction of new airports based on historical outcomes. Especially when it comes down to where the sites will be located and the environment within and surrounding the space. We have seen these regulations enacted after the first proposal of the Dryden road airport on top of a landfill, which, in hindsight, lead to demands, policies, and testing (soil testing) from the Army Corps. For all future location scouts. The first successful runoff basin in the official Tompkins County airport now matches the standard for basins in the Federal Aviation Administration Handbook. The handbook also requires the removal of nonporous soil to be replaced with preferably porous soil that “naturally filters” the runoff.

Ultimately, the history of aviation is intertwined with the environmental consequences of its development. Through our analysis of primary and secondary sources, we have gathered information regarding that the development of air travel has had an undeniable impact on the immediate surroundings and beyond. The initial Municipal airport highlights issues aviation faces with the surrounding topography, and no matter the precautions humans take, there is ultimately no controlling nature. As the Tompkins County Airport grew and became the hub for travelers in the area, we discovered the difficulties of expanding airports to keep up with the demand of travelers, constantly fighting to be the most efficient, best, and brightest.