

THE TURKEY

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Abstract

The **turkey**, also known as **Meleagris**, was one of the many animals introduced during the **Columbian Exchange**. We studied the **origins, biological, cultural, and economic impacts**, and the **continued importance** of the turkey today. From our research, we found that the turkey was brought from its original source in the new world to the old world, and later brought back to the new world. The turkey underwent biological changes to become a nutritious source of protein. Lastly, the turkey has very high cultural worth because they were valued for their meat, feathers, and traditional significance, which in turn makes the turkey have a high economic impact. Our research confirmed our predictions, and showed the significant value of the turkey in both the **old world** and the **new world**.

Figure 1



Origins

The **turkey** first originated in **Central America** in 800 BC, then again in 200 BC in the **southwest**. When **Hernán Cortés** arrived in **America** in 1519, he deliberately brought the turkey back with him to **Spain**, and it spread all over Europe and eventually ended up in **England** in 1541. The King of Spain ordered that every ship sailing from the Indies back to Spain should bring 10 turkeys, 5 male and 5 female because the turkey was so popular in Europe. In 1692, when **English** settlers sailed to **North America**, they brought **European bred turkeys** with them.

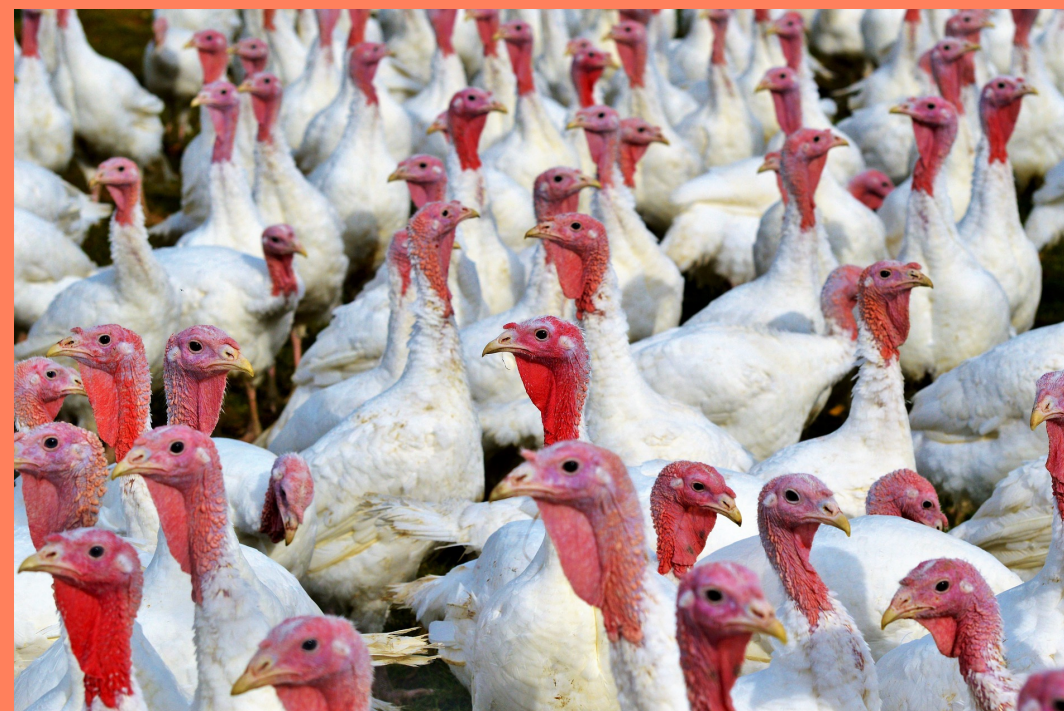
Figure 2



Biological Impact

Before **Cortés** brought the turkey to Europe, a popular meat was chicken. In 85 grams of meat, chicken has 91 kcals of energy and 20 grams of protein while turkey has 159 kcals of energy and 29 grams of protein. Chicken has 3.6 grams of vitamin C, but turkey has many more important vitamins such as vitamin A, B, and D. Although turkey has many **more health benefits** than other meats such as chicken, it did not change the European diet drastically because turkey was mainly eaten on holidays and during feasts. The turkey also underwent many **biological and physical changes** once Europeans started domesticating the bird for its meat rather than it being domesticated for their feathers. When Aztecs **domesticated** the turkey, it was much leaner and could fly up to a mile. When it was domesticated in Europe and eventually in the United States, the bird became much bigger, so it became harder for it to fly or even walk.

Figure 3



Cultural Impact

When **Spaniards** took the turkey back to Europe, it soon became popular for feasts such as **Christmas dinner**, as King Henry VIII became the first monarch to have turkey for Christmas dinner. In the 17th century when English colonists settled North America the turkey became popular for **Thanksgiving**. The domestication of turkeys also had a cultural impact on the **Aztecs** in pre-columbian Mexico. Native Americans used turkeys not only for robes and blankets, but for traditional purposes as well. For example, in Aztec religion, the turkey deity Chalchiuhtotolin, is placed in high value. Turkeys were used as sacrifices and in burials. Once Europeans domesticated the turkey, its **cultural value** for the Aztecs started to decline, but in contrast, the **cultural value** for European increased.

Economic Impact

Currently, the United States is the top producer of turkey in the world. **374, 600 jobs** were provided by the domestication turkey; this number includes the breeding, packaging and shipping of turkeys. **21.4 billion dollars** were spent on wages to pay those who work in the turkey industry. The annual **economic impact** of turkey is **97.5 billion dollars**, and **7.5 billion dollars** were spent on taxes surrounding the annual **economic impact**. Statistics show that in 2012 in the United States, the average person ate 16 pounds of turkey. **88% of Americans** ate turkey on Thanksgiving, and in the **UK, 90% of families** eat a roast turkey for Christmas. In 2008, during Christmas in the U.K., about **ten million turkeys were consumed**. In the U.K., the average twelve pound turkey costs about 60 pounds or 94 American dollars while in the U.S., a twelve pound turkey costs about 19 American dollars. The United Kingdom ranks seventh in Indigenous Turkey Meat production. To compare, Germany ranks third and produces **thirty million turkeys per year**. During major holidays in the United States during the year 2011, **46 million turkeys** were eaten on Thanksgiving, 22 million were eaten on Christmas, and 19 million were eaten on Easter. Additionally, in 2011, **703.3 million pounds of turkey were exported**. Today, the **economic impact** of the turkey is directly linked to the **cultural importance** of eating turkey on major holidays.

FUN FACTS!

- In France, there is a turkey tradition called Dinde d'Honneur (Honorable Turkey). This celebration in the town of Jaligny-sur-Bresbre calls for turkeys to be dressed up. The best-dressed turkeys are then given as gifts to dignitaries.
- In the year 1784, Benjamin Franklin stated in a letter to his daughter that he thought the Turkey should be the national bird.
- Did you know that turkeys can fly up to a mile?
- Turkeys are nonmigratory, meaning they are resident birds that tend to not travel.
- In the Old World, the turkey went by many different names, for example, Galle d'India meaning "Indian chicken", Tacchino meaning "Gobbler", and Pavo/Pabo meaning "Peafowl".
- Turkeys have great hearing and eyesight, in addition to their 320° field-of-view.

Figures

1. Wild Turkey
2. Roast Turkey
3. Turkey Farm

References:



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