THE OLIVE OIL REVIEW

SPRING 2017

Where did it come from? How has it migrated? What is its position in the modern world? How has olive oil grown into a ubiquitous commodity? Is it the most political food in the world?

FOOD IN GLOBAL HISTORY

CONTENTS

The Origins of Olive Oil & Olive Trees

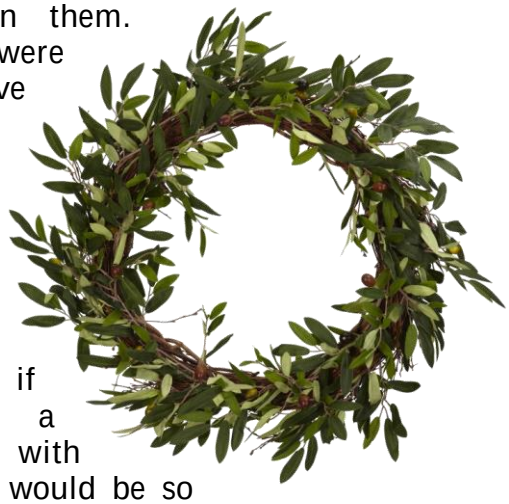
By **Yolanda King**

According to Greek mythology, the creation of the olive tree was the result of a contest between Athena, Goddess of Wisdom, and Poseidon, God of the Sea, as to who would become the protector of a newly built city in Attica (the historical region of Greece). The city would then be named after the god or goddess who gave the citizens the most precious, useful and divine gift. With his trident, Poseidon struck a rock. Water rushed out of the rock, creating a spring of salty water, symbolizing his gift of sea power. Athena

followed by striking a rock with her spear and produced the olive tree, an offering signifying fruitfulness and peace. The citizens chose the gift of Athena and she forever became the patroness of the city named after her. The story of her gift and the recognition of its value have been carried down through the millennia.

Even today, an olive tree stands where the story of this legendary competition is said to have taken place. The myth continues as a "living legend" as it is said that all the olive trees in Athens were descended from that first olive tree offered by Athena.[i]

The olive tree was associated with athletic competitions held throughout Greece in ancient times. At the Olympic Games, first held in 776 BC in honour of Zeus, athletes were massaged with olive oil in the belief that the wisdom, power and strength of Athena would be bestowed upon them. The winners were awarded olive leaf crowns and olive oil.



But it wasn't just athletes who benefited. It was also believed that if you polished a statue of Zeus with olive oil, Zeus would be so honoured that he would grant you a long and happy life. Because these stories were so popular, the olive tree became associated with strength, resistance and power.[ii] During the 2004 Olympic Games in Athens, the old tradition of crowning Olympians with olive sprays was brought

back to life. Over 2550 olive branches were utilized to revive this tradition.

Origins of the Olive Tree & Oil

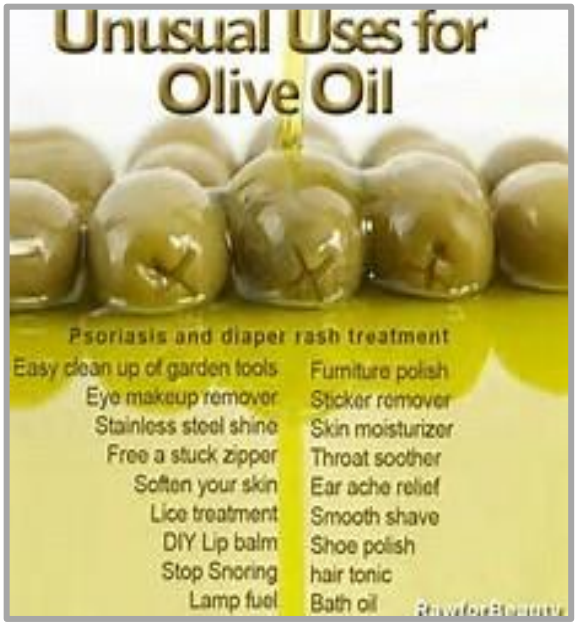
The true origin of the olive is not known but is speculated to be Syria or possibly sub-Saharan Africa. For more than 6000 years, the cultivated olive has developed alongside Mediterranean civilizations. iii Evidence indicates that the olive tree was most likely first cultivated on the border between Turkey and Syria, spreading from there throughout the Mediterranean, to Israel, Palestine, Jordan, Lebanon, Greece, Italy, France, and Spain.iv Ancient documents in Syria indicate that around 2000 BCE the value of olive oil was five times that of wine and two and a half times that of seed oils.[v]

The olive tree requires some chilling; tolerates hot, dry conditions; does not like moisture during bloom, and actually produces better with some stress. As a result, olives were traditionally relegated to lands where little else would survive. [v]

The tree of Vouves is an ancient olive tree located on the Greek island of Crete and is one of seven olive trees in the Mediterranean believed to be at least 2,000 to 3,000 years old. Although its exact age cannot be verified, the Olive Tree of Vouves might be the oldest among them, estimated at over 3,000 years old and still produces olives today. Olive trees are hardy and drought, disease and fire-resistant, part of the reason for their longevity and their widespread use in the region.[vi]

Original Uses of Olive Oil

The World Health Organization officially recommends that people across the world adopt the Mediterranean diet for better health, and specifically suggests olive oil as the healthiest source of fat on the planet. But this oil was not originally intended for consumption. In the Hippocrates code, over sixty medical uses of olive oil can be found, the most common are mainly for healing of dermatological diseases. Also, olive oil is the base of the Hippocrates diet, in combination of course, with wine and bread.[vii]



Olive oil has been used to bathe newborns, as a beverage to soothe stomach ailments, for hair care, make-up remover and moisturizer, furniture polish, lamp oil, to clean and waterproof leather as well as bath oil and soap. [viii] Many of these uses are still practiced today and well as many more.

Olive Oil in Religion

Writings in Hebrew, Christian Bibles and in the Koran, mention olives along with grapes and figs a total of 66 times (48 in the Hebrew Bible, 12 in the Christian Bible and 6 in the Koran.[ix]

In Jewish religion, olive oil is the only fuel allowed for use in the Menorah. Obtained by using only the first drop from a squeezed olive, it was then consecrated and stored in special containers for use only in the Temple. Although candles are permitted, oil containers are preferred, because they imitate the original Menorah. Another use of oil in Jewish religion is for anointing the kings of the Kingdom of Israel, a ritual dating back to the days of King David.

In the Catholic and Orthodox churches of the world, olive oil was used to bless and strengthen those preparing

for baptism. For rituals such as Baptism and Confirmation, it was mixed with balsam or some other perfuming agent and consecrated by bishops. Eastern Orthodox Christians still use 'vigil lamps,' which consist of a votive glass containing a half-inch of water, the rest of which is filled with olive oil. The glass's metal holder either hangs from a bracket on the wall or sits on a table. A cork float with a lit wick floats on the oil. To douse the flame, the float is carefully pressed down into the oil.

In Islam, olive oil is mentioned in the holy verse of the Koran. It states: "God is the light of heavens and earth. An example of His light is like a lantern inside which there is a torch, the torch is in a glass bulb, and the glass bulb is like a bright planet lit by a blessed olive tree, neither Eastern nor Western, its oil almost glows, even without fire touching it, light upon light."

The Koran further makes reference to olives as a sacred plant in the quote: "By the fig and the olive, and the Mount of Sinai, and this secure city."[x]

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[ii] Firenze, Carol. "Mythology 101: The Greatest Gift." The Olive Oil Source, 2011
[iii] Vossen, Paul. "Olive Oil: History, Production and Characteristics of the World's Classic Oils." HortScience, vol. 42, 2007, 1093-1100
[iv] Rupp, Rebecca. "The Bitter Truth About Olives." National Geographic, 2016
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[vi] Nelson, Bryan."The world's 10 Oldest Living Trees." Mother Nature Network, 2016
[vii] Bioesti "The Importance of Olive Oil in Ancient Greece." 2012
[viii] Zhang, Diane. "10 Ancient uses for Olive Oil." Epoch Times, 2013
[ix] Kaniewski, David, et al. "Primary domestication and early uses of the emblematic olive tree: Palaeobotanical, historical and molecular evidence from the Middle East." Biological Reviews, vol. 87, 2012, 885-899
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THE GLOBAL MIGRATION OF OLIVE TREES & OLIVE OIL

By: **Kelsey Jones**

Throughout its history, olive oil has represented peace, purification, fertility, strength, sanctity, victory, and glory, and therefore, it should not come as a surprise that it has experienced a global migration. [11] While it has experienced tremendous migration, documenting the exact movement of olive trees and olive oil is difficult as it occurred over a long period of time and involved numerous separate civilizations. [12] It is clear though that the olive tree and its product, olive oil, were manipulated and managed by people and civilizations. [13]

Olive Oil's Migration Story

The history of olive oil's migration is complex, with Phoenicians, Greeks, and Romans all playing an integral role in the initial migration of olive trees and subsequently olive oil throughout the northern and southern regions of the Mediterranean Basin. [14] Since the end of the Pleistocene period, the transition from hunter-gather civilizations to widespread sedentary food producing villages enabled the rise of olive oil cultivation and its economic foundation. [15] Furthermore, the movement of people from rural to urban spaces required increased cultivation and production of olive oil leading to mechanized orchards and continued forced migration of olive trees and plantations throughout the world. [16] In simplistic terms, olive oil's migration can be broken down into two main parts, its migration throughout the Mediterranean Basin and its migration into and throughout the New World.

The Mediterranean Basin

From its believed initial origin in the Middle East and Levant region in about 5500 B.C., olive trees and olive oil spread due to the expansion of civilizations and human trade. [17] The Neolithic Revolution, the transition from hunter-gather civilizations to widespread sedentary food producing villages, was integral to the migration and domestication of olive trees and subsequently the production of olive oil. [18] Exploration for new lands to settle continued the movement of olive trees, and its migration throughout the world.

Olive oil and olive trees arrived in Greece prior to 3500 B.C, and then subsequently spread them throughout the entire Greek-speaking world. [19] In addition to the Greeks, Phoenician traders brought olive trees and the product of olive oil to Cyrus and Crete in fifteenth century B.C. [20] Also, ships were built to transport oil to trading posts throughout the Mediterranean Basin leading to the further migration of olive trees and olive oil.

As the Greeks continued to colonize further geographical areas in the Mediterranean Basin, olive trees and the cultivation of olive oil continued to spread. By the eighth century B.C., southern Italy, Southern France, Spain, Portugal, Thrace, and the area surrounding the Black Sea all had established olive tree groves and the ability to produce olive oil on a small scale. [21, 22] Phoenicians were responsible for introducing olive trees and olive oil to Spain and Northern Africa around 1000 B.C. [23] Following their first interactions with the Greeks, Romans discovered olive trees and olive oil and subsequently helped to spread the commodity throughout the Roman Empire. [24] "According to the Romans, Hercules was charged with spreading the olive as he travelled throughout the Mediterranean to perform his 12 labours". [25]

Further migration of olive oil occurred when Spain and Portugal began to ship large amphorae, containers to store olive oil, to England, Germany, and areas in France and Italy. [26] Olive tree groves, the trade of olive oil, and the production of olive oil were well established in the Mediterranean Basin due to Phoenicians, Greeks, and Romans, while the migration of olive oil and olive groves into the New World was the product of European exploration and colonization.

The New World

Locations such as South Africa, Argentina, Peru, Chile, Australia, Japan, China, the United States of America, Mexico, and the Caribbean received olive trees and the means of olive oil production from European explorers and colonizers.[27] By the fifteenth century, transoceanic voyages of European explorers including, Columbus, Magellan and Juan Sebastián Elcano, helped olive trees and the production of olive oil spread throughout the New World.[28] When they were colonized, South Africa and Australia began growing olive trees for cultivation.[29] Missionaries and settlers were able to transplant olive trees to Argentina and Chile due to their similar climatic conditions to those experienced in the Mediterranean.[30] Furthermore, during the Renaissance period, Spanish and Portuguese caravels, or sailing ships, brought olive tree saplings to the Americas.[31]

"There was wealth to be made in cultivating [olive trees], but getting them to survive and thrive in the New World wasn't always easy. Of the more than 100 olive tree cuttings that one man imported to Peru, only three survived".[32] Olive trees were also brought to Mexico and the Caribbean from Spain around 1497.[33] The United States of America received olive tree plantations when "Spanish Missions" arrived in California in 1775.[34] In 1870, small olive orchards were planted along the California coast from San Diego to Sonoma, and in various foothills of the Sierra Nevada Mountains.[35] The first olive oil pressed and produced in California occurred in 1803.[36] From the nineteenth century forward, olives could be found growing commonly by the sea between the 25 and 45 degrees latitude in both the northern and southern hemispheres of the global, making up the current distribution of olive trees, and the places in which can produce olive oil.[37]

It should be noted that while exploration and colonization can be credited with the majority of olive oil and olive tree migration, migration of olive trees also occurred through natural pathways. These natural pathways, however, are not as well documented due to their mixing with olive trees spread by people, civilizations, and explorers and therefore cannot be adequately included in the discussion of olive oil's migration.

During the eighteenth and nineteenth centuries, olives were not an industrial crop, they were grown in small groves on peasant farms and were used for their wood and other food products rather than their oil. [38] It wasn't until the twentieth century that olive oil production became the key product of olive tree cultivation, leading to an expansion of oil production and exportation from its production sources. [39] Furthermore, the migration of olive oil production equipment and storage apparatuses, such as amphorae, allowed olive oil to migrate as well. Without the Neolithic Revolution, global exploration, and colonization olive oil and olive trees would not have the same expansive geographical growing and production zone as they do today.

Today and the Future

Nowadays, the main producers of olive oil are Spain, Italy, and Greece; however, there are numerous other countries producing olive oil. Algeria, Argentina, Australia, Egypt, France, Portugal, Tunisia, Turkey, and the United States all produce olive oil, but at a much smaller scale than the top three producers, and transport it to other countries for consumption. [40] The number of olive oil consuming countries is much larger. Algeria, Argentina, Australia, Brazil, Canada, Egypt, France, German, Greece, Italy, Portugal, Spain, United Kingdom, Tunisia, Turkey, and the United States all consumer olive oil, to only get the list started. [41] As health concerns about the consumption of animal fats continue, olive oil will remain an important healthy fat alternative commodity. [42]

From a sacred commodity to the people in the Mediterranean Basin, to a global, commonly used commodity, the story of olive oil's migration may not be over. As capitalist interests and technological advancements persist, the cultivation of olive trees for the production of olive oil may continue to migrate to places previously believed to be unsuitable for the growth of olive trees. As demand continues for olive oil, its migration may continue as well.

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[20] Linda Civitello, *Culture and Cuisine: A History of Food and People* (John Wiley & Sons, Inc.: 2008), 31.
[21] Ibid.
[22] P. Vossen, "Olive Oil: History, Production, and Characteristics of the World's Classic Oils," *Horticultural Science* 42, no. 5, (2007): 1093.
[23] Ibid., 1093.
[24] Iosif E. Kapellakis, et al., "Olive Oil History, Production and By-product Management," *Reviews in Environmental Science and Bio-Technology* 7, (2008): 2.
[25] Maguelonne Toussaint-Samat, *A History of Food* (Wiley-Blackwell: 2009), 191.
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[32] Linda Civitello, *Culture and Cuisine: A History of Food and People* (John Wiley & Sons, Inc.: 2008), 118.
[33] Ibid., 31.
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[35] P. Vossen, "Olive Oil: History, Production, and Characteristics of the World's Classic Oils," *Horticultural Science* 42, no. 5, (2007): 1094.
[36] Linda Civitello, *Culture and Cuisine: A History of Food and People* (John Wiley & Sons, Inc.: 2008), 31.
[37] Maguelonne Toussaint-Samat, *A History of Food* (Wiley-Blackwell: 2009), 187.
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[39] Ibid., 162.
[40] Luis Rallo and Concepción Muñoz-Díez, "Olive Growing in a Time of Change," in *Soils, Plaint Growth and Crop Production*, ed. Willy H. Verheye (EOLSS Publications, 2010): 221.
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The Position of Olive Oil in the MODERN WORLD

By: **Kathleen Fung**

For centuries, olive oil had a major role in the Mediterranean diet, as well as for medicine and lamp fuel. Presently, olive oil is increasingly consumed for nutritional purposes. Additionally, olive oil derivatives are used in modern cosmetics.

Economy

The Mediterranean countries supply a large majority of the world olive oil production. Every year, the production and consumption of olive oil increases. The International Olive Council published table data in November 2016, showing the general increase of olive oil demand from 1990 to 2016 (fig. 1).

As the demand for olive oil is rapidly increasing worldwide, the environmental pollution caused by olive mill wastes is a growing problem, notably in the Mediterranean region. The production wastes are composed of many complex substances that are not easily degradable. Their emissions create strongly odorous volatile compounds. The disposed of wastes into the environment affect soil quality as they are toxic to plant life.

Finding an environmentally friendly and economically viable solution is the main problem behind olive mill waste disposal. Currently, there are many possible disposal treatment methods, such as reducing the biological oxygen demand and chemical oxygen demand to enable removal of organic and inorganic solids (Caputo et al. 2003). However, most of the treatments are only feasible for large enterprises

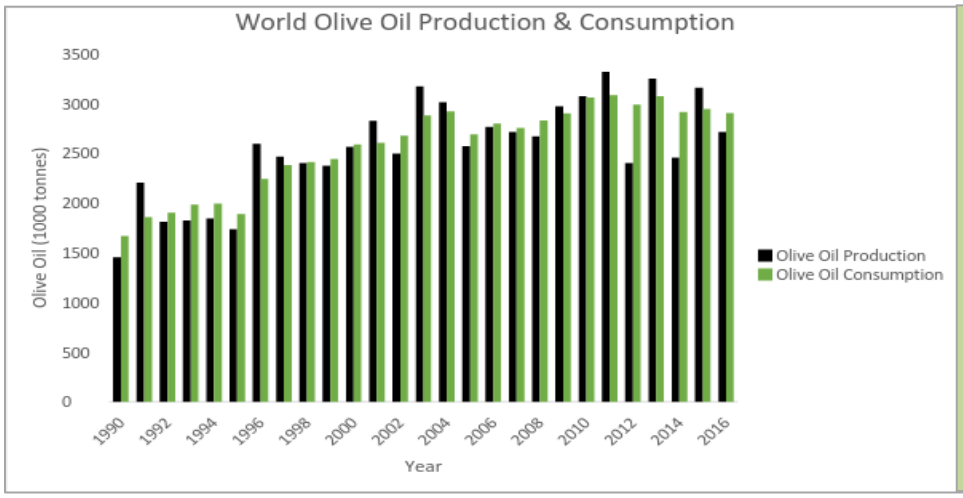


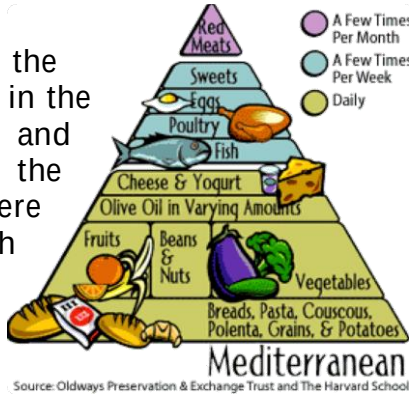
Figure 1. World olive oil production and consumption from 1990 to 2016 (International Olive Council 2016)

because disposal treatments are very expensive. Most of the insufficiently disposed of toxic wastes are generally from small enterprises with limited financial resources. Although treatments are very expensive, it may be economically profitable to treat olive wastewater disposal in favour of avoiding external disposal costs.

Despite the toxic waste compounds, there are studies indicating that these wastes may also be used as an economic resource, such as soil conditioner and biomass fuel. Rozzi and Malpei (1996) indicated that Spain and Italy have conducted extensive field studies and research to demonstrate the high fertilizing and soil conditioning value of olive mill wastes. Natasha Mortimer (2016) acknowledged the potential of olive oil production waste as a valuable source of fertilizer, however, it may also cause plant mortality due to its potential phytotoxicity.

Health Benefits

Olive oil is the principal source of fat in the Mediterranean diet. The popularity growth of the Mediterranean diet is largely as a result of epidemiological studies showing that the incidence of coronary heart disease and certain cancers (ex. breast and colon cancer) is low in the Mediterranean basin. Ancel Keys and Flaminio Fidanza, principal investigators for the Seven Countries Study, were involved in the first surveys of coronary disease risk. The Seven Countries Study was the first major study to investigate diet and lifestyle along with other risk factors for cardiovascular disease, across countries and cultures over an extended period of time. Their contribution to the study aided the surging popularity of "The Mediterranean Diet" as they determined that the dietary patterns in the Mediterranean and in Japan in the 1960s were associated with low rates of coronary heart disease and all-cause mortality. Three countries were categorized as Mediterranean in the Seven Countries Study: (1) Greece; (2) Croatia; and (3) Italy. The Greek diet had the highest content of olive oil, the Croatian diet was highest in fish, and the Italian diet was high in vegetables. Therefore Keys and Fidanza concluded that diets rich with olive oil, fish, and vegetables, corresponded to low mortality rates from coronary heart diseases.



Medicinal Cosmetics

Medicinally, olive oil relieves burns and stings. The nourishing properties of olive oil have been known for thousands of years. Mediterranean soap makers created olive oil soap, which is renowned for its moisturizing properties and gentleness. Ancient Egyptians used olive oil to make creams and perfumes. Viola and Viola (2009) even stated that Cleopatra utilized olive oil as an anti-wrinkle cream. Furthermore, many studies have proved the skin benefits of olive oil on infants. A paper published in Pediatric Dermatology journal by Kiechl-Kohlendorfer and colleagues (2008) determined that infants treated with olive oil cream showed statistically lower atopic dermatitis than those treated with an emollient cream.

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The Growth of Olive Oil

→ How it became such a ubiquitous commodity

By Bryden O'Gallagher

Olives have been a part of human history for as long as 8000 years, dating at least as far back as the early Bronze Age (Uylaser and Yildiz, 2011). The olive tree is mentioned several times in both the Quran and the Bible, while olives are a sign of peace, abundance, and health in ancient literature (Vossen, 2007) Since their early establishment in Mediterranean culture, olive and their derivative products have become a ubiquitous commodity across the globe. Despite their native origins to the Mediterranean region of what is now southern Turkey, Syria and Lebanon, the olive tree is widely cultivated today across the Middle East, Europe, North America, South American, even Australia (Angeliki and Giourgo, 2003). Here we will explore why olive oil, and olive cultivation grew into such a ubiquitous and widely used commodity throughout human history.

The variety of health benefits associated with olives likely played a major role the commodities growth throughout the Mediterranean region and the rest of the world. Olives contain high concentrations of organic phenolic compounds that function as potent antioxidants. Olives also provide a healthy source of dietary fat, namely monounsaturated fatty acids (Uylaser and Yildiz, 2011). Phenolic compounds, like the ones found in olive oil, have been associated with lower risk of coronary heart disease, lower risk of certain cancers, and lower inflammation. Table olives and olive oil form a significant part of the Mediterranean diet, and likely play a role in the decreased risk of disease observed in parts of the Mediterranean region (Serra-Majem, 2006). Since recent studies have shown correlations between the Mediterranean diet and lower risks of heart disease and caner, it has become increasingly popular in North America. The widespread

expansion of olive oil as a staple in the diets of people in the Mediterranean, as well as cultures, can be partly attributed to its role in health and preventing disease.

Another reason olive oil has been an essential commodity in history, and ubiquitous in the modern world, is the ecology of how the olive tree grows. Olive trees are particularly resistant to stress, which results from their high concentrations of phenolic compounds. These compounds play a role in herbivore and pest defense in plants, meaning olive trees need minimal input of chemicals (herbicides, pesticides) for growth (Angeliki and Giourgo, 2003). Olive trees are drought resistant, being one of few crops capable of surviving on 200-300m of annual rainfall, which is achieved by their extensive root system (Fresco, 1996). The remarkable resilience of olive trees can be attributed to its adaptation to surviving in the Mediterranean region, which typically consists of dry soils with low productivity. Furthermore, cultivation of olive is semi-intensive, requiring low chemical and physical inputs in comparison to other agricultural crops (Loumou, 1994). Olive trees therefore provided an easier and more accessible process of cultivation, contributing to its widespread utilization. The ability for olive trees to grow in unfavorable conditions, as well as their comparatively low cultivation requirements, were instrumental in the growth of olive derived commodities.

Another aspect of olive tree cultivation that likely played a role in its widespread utilization throughout a variety of regions, particularly in the Mediterranean, is its unique compatibility with sustainable agriculture. One of the reasons olive cultivation promotes sustainable agriculture is its remarkable stress resistance and lack of pernicious pests, which would otherwise require harmful chemical application (Cirio, 1997). The olive tree has a wealth of beneficial relationships with arthropod fauna, resulting from their lengthy growing period. Arthropods provide important food for a number of birds, such as blackbirds and starlings, which rely on olive groves and their ecosystem to survive winter (Crovetti, 1996). Olive trees are evergreen trees, producing fruit with high-energy content available throughout the winter season, which

supports a diversity of animal species. Remarkably enough, the flora of the artificial olive grove ecosystem closely resembles the flora of natural Mediterranean type ecosystems, contributing to its sustainability (Margaris, 1980). Consequently, productive olive grove systems improve soil productivity, and promote healthy diversity of flora and fauna in the ecosystem. The sustainable nature of olive cultivation has been essential in the constant presence of olive oil in history and modern culture. The unique beneficial qualities of olive tree cultivation, compared to other agricultural crops, surely contributed to its widespread expansion to non-native regions of North America, South America, and Europe.

Olive oil has grown into an essential commodity to cultures all over the world, despite its humble beginnings in the Mediterranean region. The ubiquity of olive oil throughout history and modern culture is largely a result of its important role in nutrition, providing healthy fats and antioxidants. Additionally, the convenience of cultivating olive groves and the remarkable reliance of olive trees to environmental stress, were also influential in allowing its expansion around the globe. Furthermore, the role of olive groves in promoting sustainable agriculture, biodiversity, and soil productivity were crucial in maintaining olive oil as a staple commodity for thousands of years. Therefore, it is evident that olive oil and olive cultivation have unique qualities that have facilitated their widespread growth throughout history and he modern global community.

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OLIVE OIL

The Most Political Food in the World?

By Aimee Bertin

Extensions of Israel's separation wall and restrictions from Israeli occupation are posing many threats to Palestinian olive oil production

PHOTO: Yair Altman

Industrial agriculture. Genetically modified produce. The organic movement. Food and politics are much more intertwined than we care to believe, affecting every ingredient lining the shelves of our grocery stores. However, few commodities have been quite as influenced by affairs of state as the ubiquitous and versatile olive oil. Considered by many to be the "most political food in the world", olive oil crosses borders to reach us here in North America, but its production is greatly hindered by border controversy between Palestinian and Israeli citizens.

Importance to Palestinian Economy

For many Palestinians, olive trees are a major agricultural crop, and a powerful symbol of the Palestinian attachment and connection to the land. Due to their drought resistance and tolerance to poor soils, olive trees have become a representation of Palestinian resistance and resilience. Some of these olive trees date back 4,000 years, growing parallel to the history and perseverance of Palestinian people on the land[2]. Many olive groves have flourished through familial generations, as they are not only symbolic in meaning, but provide great economic opportunities for farmers.

According to the UN annual report, over 45% of agricultural land in Palestine is planted with an estimated 10 million olive trees[5]. These trees together have the potential to produce between 32,000 and 35,000 metric tonnes of oil[5]. Whether this oil is used for production of food-grade olive oil, pickles, table olives, or soap, the agricultural land on which it grows is depended upon by 100 000 families in the region[5]. In 2008, the olive industry contributed $123 million to the fragile West Bank economy, 18% of the total agricultural production[5].

Re-ruralization of the West Bank

Olive trees were not always a significant contributor to the West Bank economy, but rather developed out of necessity. The loss of labor opportunities in Israel after the first uprising left many Palestinians unemployed and with little to do. This enforced idleness continued into 2000 when the Israeli military imposed a lockdown on entire districts, blocking people and goods from entering or leaving[3]. These closures led to what has been described an involuntary 'reruralization' of the West Bank, with a revitalization of the olive oil industry[3]. Growing, maintaining, and processing olives provided meaningful and lucrative work to Palestinian farmers, generating enough income to encourage them to stay on their land. However, while that majority of the harvest is consumed domestically, movement restrictions and obstacles imposed by the Israel Defence Forces have reduced access to land and markets.

The landlocked West Bank has been "re-ruralized" with agricultural olive groves

PHOTO: Howard Lovy

Restrictions from Israeli Occupation

Olive oil is a relatively durable food commodity, given that it will not rot as quickly as fresh produce. Unlike wine or cheese however, olive oil does not improve with age and is best consumed within a year or two of production. It is extremely sensitive to exposure to heat, air and light, which can deteriorate the quality of the oil and cause it to go rancid. As such, the best method of storage is within dark glass bottles, but these bottles are both heavy and easily breakable- rendering the commodity difficult to ship and store[3]. Farming is a difficult occupation worldwide, but Palestinian olive farmers face particular challenges when trying to produce and export their products. As Palestinians produce more olive oil than they consume,

"If the settlers did not have the protection of the army, they would not dare touch our trees."

- Mohammad Hamoudah, Palestinian olive farmer

they need to find markets for the surplus. Unfortunately, two major markets were lost in the last two decades: the Palestinian workers in the Gulf states who were evicted after the Iraqi invasion of Kuwait, and Jordan[3]. In Jordan around 1990, Saddam Hussein closed the border to Palestinian oil to encourage the domestic production of Jordan's own olive oil[3]. Even when possible, Palestinian producers and marketers have been reluctant to sell to large Israeli firms, who purchase olive oil from poor farmers for less than it costs to produce it. This product of Palestinian labour and production is often labelled as a "Product of Israel", furthering resentment between the two territories[3].

Israeli movement restrictions have also affected access to fields, markets and processing, raising transport costs and impeding delivery. Olive oil travels on the same roads as Palestinians citizens, and as such suffers the same delays. While the Israeli bypass highways provide fast and efficient transport for workers, their use is forbidden to Palestinians. The Palestinian highways, in contrast, are not only poorly maintained, but they are interrupted by frequent and time-consuming Israeli checkpoints[4].

The West Bank Barrier

In 2002, the Government of Israel approved construction of a Barrier in and around the West Bank with the intended purpose of preventing violent attacks by Palestinians in Israel. The route of the Barrier (86% of which is inside the West Bank) has not only caused the uprooting of tens of thousands of olive trees, but it has weakened the productivity of the olive oil industry by separating Palestinian farmers from their olive groves[5]. The Israel Defense Forces have installed gates in the Barrier and implemented a permit program to facilitate access for farmers, but these 'visitor' permits are difficult to obtain and do not work with the needs of Palestinian farmers. A survey conducted by the Office for the Coordination of Humanitarian Affairs found that in the northern West Bank, 80% of people who worked to the west of the Barrier were unable to receive permits[6]. As recently as 2016, Palestinian farmers were separated by the Barrier from the Cremisan Valley, an area known worldwide for producing olive oil of the finest quality[1]. Additionally, illegal Israeli settlements within this Barrier (protected by the Israeli army) have expanded into Palestinian olive groves, worsening Israeli-Palestinian relations through violent attacks and demolition of valuable olive farms[7].

Farmer pulls branches loaded with olives that were cut by Israeli settlers out of an orchard near the village of Yasouf, West Bank.
Photo: Max Becherer

Theft and Destruction

The Palestinian olive groves in the vicinity of Israeli settlements have faced incidents of crop theft, tree uprooting, harassment and physical attacks in the war over land. In 2013, the United Nations reported that Israeli settlers damaged or destroyed nearly 11,000 olive trees and saplings owned by Palestinians in the occupied West Bank[7]. The UN also recorded 386 assaults against Palestinians and their property by Jewish settlers in the West Bank, with an additional 50 incidents of vandalism and attacks against Israelis by Palestinians[5].

Fair Trade Program

For thousands of farming families in Palestine, companies like Zaytoun have introduced fair trade practices and created a market for Palestinian products in the UK and worldwide[4]. "Community Interest Companies" such as this have let many farmers sell their crops for a price guaranteed to be above the cost of production. Additionally, the UN has recognized the significance of the olive sector for the Palestinian economy in promoting the right to enjoy an adequate standard of living. Over the years, the United Nations Development Programme has invested approximately US $ 26 million in projects to develop olive trees and improve the olive harvest[6]. However, Palestinian olive growers are still facing the many multi-faceted challenges of Israeli occupation as the war over agricultural land persists. Furthering the long standing tensions between Israel and Palestine, olive oil is certainly one of the most political foods in the world.

Further Reading:

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4. Quinn, "Is Olive Oil the Most Political Food in the World?", The Guardian (January 7, 2015)
5. United Nations Development Programme, "The Olive Harvest in the West Bank and Gaza", World Food Programme (2008)
6. United Nations Development Programme, "Olive Harvest Factsheet", Office for the Coordination of Humanitarian Affairs (October 2012)
7. Booth, "In the West Bank, Palestinian gird for settler attacks on olive trees," Washington Post (October 22, 2014)