



By Bruce Rich

Georgia, Wine, and Biodiversity

The Republic of Georgia might seem far away but it and adjacent areas around the Caucasus and eastern Turkey have been at the heart of the evolution of civilization and the relationship of humankind to the domestication of wild species and the invention of agriculture. The land of present-day Georgia and adjacent areas is the center of origin of the cultivation of numerous fruits, vegetables, and grains, including einkorn wheat, chickpeas, and vines for winemaking, as well as one of the first places where animals were tamed for domestic use. According to Patrick McGovern, director of the Biomolecular Archaeology Project at the University of Pennsylvania Museum, Neolithic sites and pottery from Georgia and eastern Turkey indicate that these areas were “likely hotbeds” of agricultural experimentation.

A country slightly smaller than South Carolina, Georgia includes two of the world’s 35 biodiversity hotspots (defined by groups such as Conservation International as priority areas for diversity and endemism of species), with 4,500 species of vascular plants, 108 mammal species, 53 reptiles, 84 fish, and over 360 birds. According to the U.S. Agency for International Development, “As many as one half of the naturally occurring vascular plants in Georgia have some value” in the traditional life of people in the country.

Although Georgia suffered from the

political and economic hardships of the Soviet system, a 2009 AID analysis states that “natural resources were well protected under Russian rule” and the economic collapse of the country in the post-Soviet period led to a decline in Georgia’s agricultural biodiversity as well as hunting to the point of endangerment endemic mammals such as the Caucasian tur, a mountain dwelling, goat-like antelope. International aid agencies and conservation NGOs have done much in recent years to safeguard Georgia’s biodiversity, including strengthening support for some 36 protected areas covering seven percent of the country’s land area, including eight national parks.

But it is the area of agricultural biodiversity where Georgia is perhaps unique, since despite the Soviet economic organization of the republic as a mass producer of a limited variety of wines for the entire Soviet bloc, traditional cultivation and uses of a great variety of different species of fruits and plants continued on a household basis in remote rural communities — and in recent years has enjoyed a renaissance.

Wine production is perhaps most emblematic of this rejuvenation, and the Georgian example illustrates the intimate connection between millennia-old traditions of cultivation of numerous species of grapes and the evolution of civilization. According to McGovern, “There is a great deal of archaeological and historical evidence for what can be called a ‘wine culture’ gradually radiating out in time and space, from small beginnings in the northern mountains of the Near East in the Neolithic, to become a dominant economic, religious, and social force throughout the region and later across Europe in the millennia to follow.” Miraculously, today one can experience this wine culture as something still alive in the country.

Of the more than 4,000 grape varieties in the world, Georgia has 520, and in recent years it has become an

epicenter of a resurgence in traditional winemaking, using varieties and fermentation techniques thought to date back 9,000 years. At the heart of this approach is the use of large, specially made clay vessels called qveri for fermentation and storage. A special kind of clay is used, and the inside of the vessels is coated with a layer of beeswax, which seals the clay and inhibits bacteria.

In the Georgian tradition, the wine is fermented in the qveri together with the grape skins and seeds over a period as long as six months, whereas today most wine around the world filters out the skins and seeds early in the process. This “pomace” slowly transfers the special taste and qualities of the particular variety of grape to the wine, making it unusually tasty, free of additives such as sulfites, and often rich in tannins, which may have medicinal properties. Tourists today can visit the ruins of ancient cave cities with winemaking installations dating back 4,000 years.

Some aid agencies such as Germany’s have focused on supporting marketing cooperatives that have established sales networks for European consumers not just for wine, but a wide variety of Georgian

fruits, berries, herbs, roots, spices, and mushrooms, with the goal of maintaining the country’s village economies and extraordinary agrobiodiversity.

The links between Georgia’s cultural history and its globally outstanding agricultural legacy led UNESCO last year to officially designate Georgia’s winemaking tradition as part of the “Intangible Cultural Heritage of Humanity.” This designation could be important in creating further economic demand around the world to sustain Georgian winemaking and agricultural biodiversity.

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The country has an outstanding legacy of agricultural biodiversity