Correction to:
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Abstract book

Editors: Bohdan Lojka, Šárka Hoffmannová

Due to the error in the system we inadvertently omitted one Abstract from the book, text **A Decade of Dynamic Growth in U.S. Agroforestry by Michael Gold**. Text of missing Abstract see next page.

Mendel
University
in Brno

A Decade of Dynamic Growth in U.S. Agroforestry

Professor Michael Gold[1]

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Plenary session: keynote speech & panel discussion (I), Aula, 28 May 2024, 11:00–12:00

Over the past 80 years, the dominant forms of U.S. agriculture have trended heavily towards high yielding, mechanized, fossil fuel and input intensive, large-scale crop monocultures. Farms with sales of over $1 million represent 3.9% of all farms with an average farm size of 2,920 acres (1,182 ha.), yet these large-scale farms dominate the agricultural landscape across the U.S. (e.g., California, Kansas, Iowa, Illinois). In 2024, planting estimates include 47.0 million acres (19 M ha.) for wheat, 91.0 M acres for corn (37 M ha.) and 87.5 M acres for soybeans (35 M ha.).

U.S. agriculture policy, agriculture subsidies, and the agriculture "knowledge network" of federal and state government support, agriculture industries (e.g., John Deere, Tyson Foods, Bunge Ltd., Archer Daniels Midland, Cargill Inc.), national and state farm organizations (e.g., Farm Bureau, Corn Growers, etc.) and U.S. Land Grant Universities (e.g., Iowa State, Univ. of Illinois, etc.) heavily favor the continued trend toward large-scale crop monocultures, GMO seed, large-scale equipment, large-scale confined feeding operations, processing, and export.
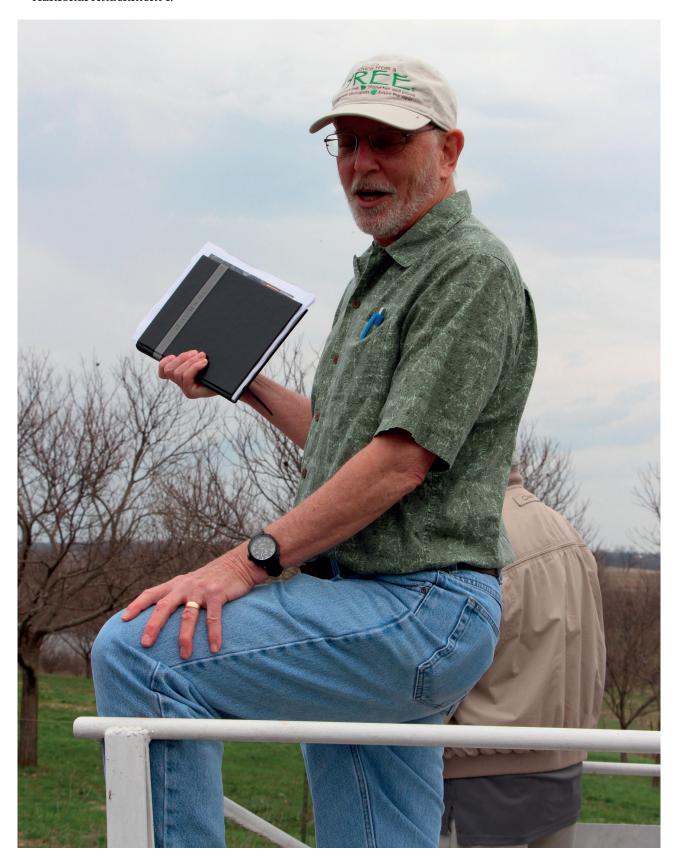
Interest in US agroforestry can be attributed to a confluence of factors, including a shift towards sustainability in agriculture, heightened awareness of agriculture's environmental degradation, recognition of agroforestry's potential to address challenges such as soil erosion, biodiversity loss, climate change mitigation, along with the development of new specialty crop markets for diversified income streams. Recent major increases in funding are helping to catalyze this growth.

Agroforestry practices (i.e., traditional ecological knowledge - TEK) have been used by indigenous people in North America for millennia (similar to Asia, Africa, Europe, etc.). "Western science" recognition of agroforestry was initiated in the late 1970's. While there was no official agricultural census data on agroforestry until 2012, between ~1980-2010 awareness and adoption of agroforestry by U.S. farmers grew slowly. During the 1980-2010 period, the critical "knowledge infrastructure" for agroforestry was in its early stages of development. Compared to continued multi-billion-dollar annual investments in agriculture and livestock industries by Federal and State governments and the private sector, there was minimal direct Federal and/or State government funding for agroforestry research and outreach. The USDA National Agroforestry Center (established in 1990, with a limited budget and staff), along with a small number of US Universities, including the University of Missouri Center for Agroforestry (UMCA, established 1998), were actively engaged in research, education, and training along with the production of relevant media and technical publications. Biennial North American Agroforestry Conferences were initiated in 1989. A professional association, the Association for Temperate Agroforestry (AFTA) was formally established in 1993 followed by the creation of regional agroforestry working groups. Specialty crop fruit and nut coops began to form post-2000. Up to 2013, NGOs, Foundations, the private sector, along with federal and state funding were minimally engaged to support US agroforestry growth and development. Agroforestry adoption lagged.

Beginning ~2013, major positive changes occurred in the US agroforestry landscape, rapidly filling the gaps in the agroforestry knowledge infrastructure. Positive changes include: (1) In 2013, UMCA established 100% online masters and graduate certificate programs in agroforestry and, concurrently, created an annual "Agroforestry Academy" to train natural resource professionals and landowners. (2) Active agroforestry NGOs and the private sector were established and have grown very rapidly. Prime regional examples include Appalachian Sustainable Development (circa 2010, 2020) the Savanna Institute (2013), Interlace Commons (2016), Propagate (2017). (3) The USDA National Ag. Census includes baseline agroforestry information (2012, 2017, 2022). (4) The Edwards Mother Earth Foundation (2021) and Grantham Foundation (2022) make multi-million-dollar investments in agroforestry adoption (multiple NGOs and Universities) and specialty crop development (Canopy Farm Management). (5) An active and well supported Agroforestry Coalition is established (2022) "to create a network of agroforestry agitators, innovators and experts working across sectors to scale up agroforestry in the United States". (6) The US Department of Agriculture invests over $150 million through their multi-billion-dollar Climate Smart Commodity program (2022) in dozens of organizations to support agroforestry adoption by US farmers. (7) Agroforestry is being considered for additional funding in the 2024 US "Farm Bill" (i.e., federal legislation passed once every five years sets the stage for the US food and farm systems).

As of 2024, U.S. agroforestry is approaching a "tipping point" with a rapidly growing knowledge infrastructure supported by recent major increases in funding from federal and state governments, new thriving NGOs, engaged Foundations, increased University research and outreach, and an active private sector. A rapid increase in adoption of agroforestry practices can be expected by the end of the decade (2030).

Aditional Attachment I.

Aditional Attachment II.