

Food Sovereignty Foundations: The Role of Restorative Beekeeping in Advancing Food Security

*Reviving Pollinator Relationships within
Hemish Traditional Ecological Knowledge
as Wholistic Diabetes Prevention*

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Presentation Objectives

- Define restorative beekeeping within food sovereignty
- Discuss the Hemish ecological, and nutritional importance of bees as culturally appropriate models in diabetes prevention
- Explore community-based applications for Hemish health and food systems





What is Food Sovereignty?

“Food sovereignty is kinship sovereignty. It’s about being in right relation to plants, animals, water, and each other.” Dr. Melanie Yazzie

Food Security	Food Sovereignty
Focuses on sufficient calories and nutrients are available	Emphasizes who controls the food system
Often involves imports or charity	Involves community-based, self-governed food systems
Ignores production method and cultural relevance	Centers ecological and cultural food traditions

Diabetes Prevention Reimagined

“Social determinants of health (SDOH)—often out of direct control of the individual and potentially representing lifelong risk—contribute to health care and psychosocial outcomes and must be addressed to improve all health outcomes...Diabetes-related health inequities are well documented and have been associated with greater risk for diabetes, higher population prevalence, and poorer diabetes outcomes.”

American Diabetes Association; Standards of Care in Diabetes—2023 Abridged for Primary Care Providers. Clin Diabetes 2 January 2023; 41 (1): 4–31

Figure A: Indigenous Social Ecological Model



Akbar, L., Zuk, A. M., & Tsuji, L. J. (2020). Health and wellness impacts of traditional physical activity experiences on indigenous youth: A systematic review. *International Journal of Environmental Research*

INDIGENOUS SOCIAL DRIVERS OF HEALTH

NATIONAL INDIAN HEALTH BOARD

National Indian Health Board ISDOH Risk & Protective

- Food Systems: (1) Mass produced foods replacing Indigenous diets. (2) Access to and health of traditional plants. (3) Indigenous traditional medicine
- Commercial Drivers of Health: (1) Mass produced food replacing Indigenous diet (2) Misconstruction of food security for Indigenous Peoples and communities (3) Structured, systematic, and targeted populations

Hemish ISDOH Protective & Risk Factors

- Food Systems: (1) Strong culture in traditional farming (2) Strong traditional knowledge in medicines (3) Strong culture in traditional hunting
- Cultural Drivers of Health: (4) Large population of elders (5) Centralized population (6) Value of traditional Indigenous foods as healthier, culturally significant alternatives (7) Society/ kinship systems

**"Food is an indicator of the health of a society."
A-dae Romero-Briones (Cochiti/Kiowa)**



The Crisis:
Pollinator Decline
& Industrial Food
Systems

**Worldwide, bee populations
have dropped by more than
40% in some regions over the
past two decades.**



Industrial Apiaries & Extractive Bee Keeping Models



- Bees are trucked thousands of miles to pollinate monocrops.
- These **unnatural migration cycles** weaken immune systems, increase exhaustion, and make bees more vulnerable to disease.
- Constant disruption of hive stability violates bees' natural rhythms and kinship systems.


Consequences:

- Loss of traditional diets
- Increased dependency on external food systems
- Rising diabetes & metabolic disease




What is Restorative Bee Keeping?

Bees teach us about cooperation, listening, and tending to collective well-being. Restorative beekeeping is about remembering that our survival is woven together. This is a fundamental principle of relationality and building healthy food systems.

 *Bees are not meant to be seasonal workers. Industrial mobility strips them of their ecological place and relational balance.*



The Hemish Case Study



Practices in Restorative Beekeeping

- Place-based
- Chemical free
- Plant diversity
- Nucs versus Packaged Bees



DIFFERENCES BETWEEN **PACKAGE BEES** **AND NUCS**

Picking the right bundle for your beekeeping experience.



Bee Care

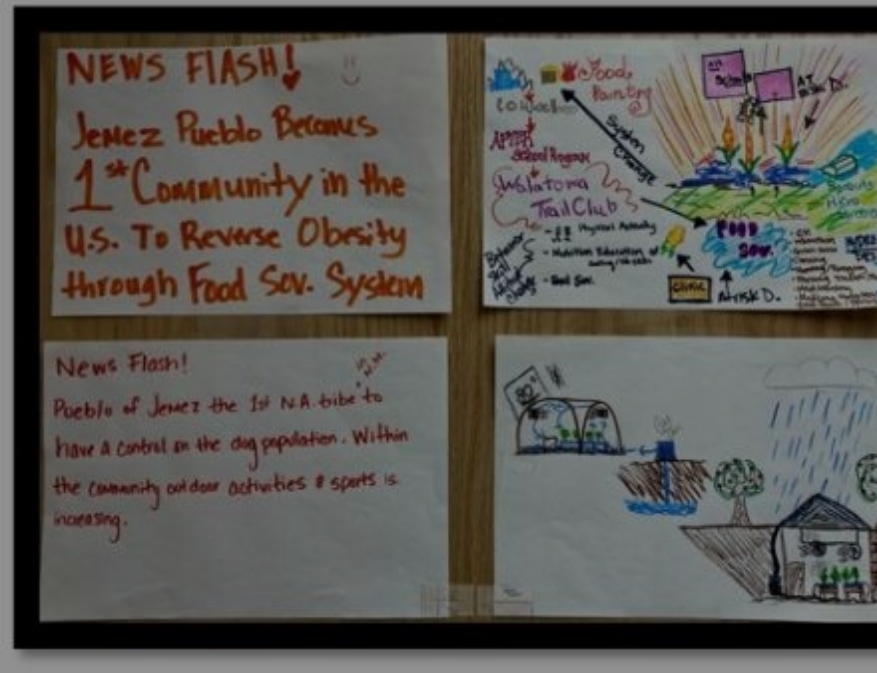
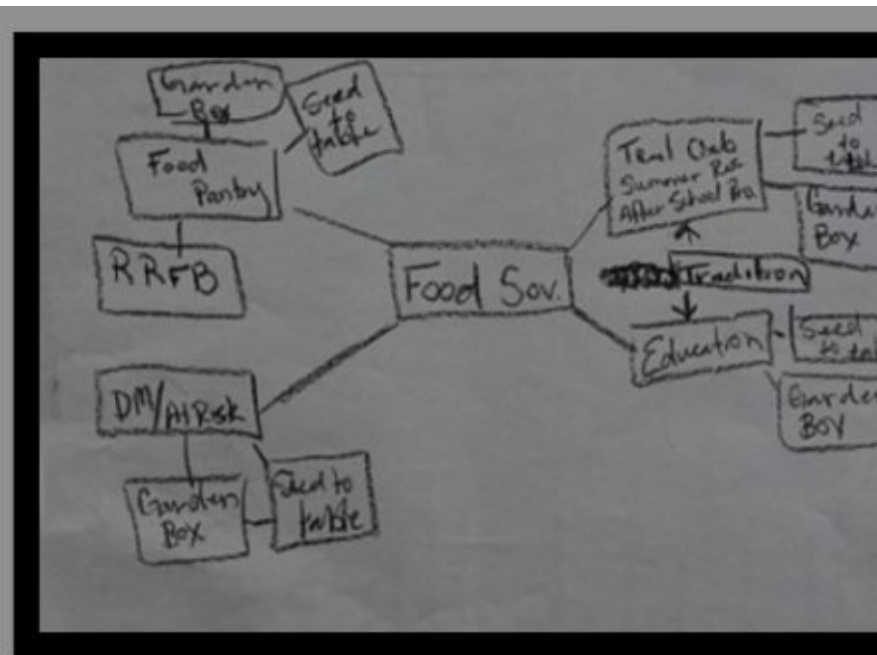


*"Do you understand that
your quality of life and
your survival are tied to
how authentic and
generous the connections
are between you and the
people and place you live
with and in?"*

Adrienne Marie Brown

Bees support food security per food sovereignty principles by:

- Increasing crop yields: fruits, vegetables, nuts
- Supporting medicinal plant pollination and seed security





Thank
You!

