TOP

EXPLORATION 2: PART 3 – BERLIN BRINGS BEES BACK

Honey Bee Habitat

Heinz Risse teaches <u>apiculture</u>, the scientific term for beekeeping, at the *Prinzessinnengarten*. With the low investment cost and low maintenance required to manage honey bee hives, apiculture is a thriving hobby in Berlin. Rooftop apiaries on apartment and commercial buildings are gaining popularity, especially in Kreuzberg.

It is difficult to credit one individual for the surge in urban beekeeping. Historically, increases in apiculture activity are a response to economic hardship. Following <u>reunification</u>, Evelyn Jesse started Berlin's first beekeeping supply store in 1990. Her busy season usually begins in May and August. However, in recent years off-season business has risen as more people take up beekeeping. The current increase in apiculture is motivated by a personal desire to take action to address environmental concerns about global bee losses and colony collapse.

Urban beekeeping is a sweet deal for honeybees and humans. *Berliner Honig* (Berlin Honey) is jarred in a small factory near *Alexanderplatz*. Noting limited availability of local honey in grocery stores in Berlin, Annette Mueller and her partner Jens-Michael Lehmann started *Berliner Honig* in 2010. Jars of *Berliner Honig* are stamped with the collection date, the beekeeper's name, the trees the bees pollinated, and the location of the hive. The price of a jar of *Berliner Honig* is expensive compared to imported, mass-produced honey. However, the unique flavors attributed to Berlin's diversity of flowering trees are in high demand. The supply always sells out (Lomas, 2012).

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Building in Biodiversity

Berlin has also responded to declining wild bee populations by incorporating green space into land development planning. Christoph Sauer, a wild bee expert, has been monitoring wild bee species in Berlin and the surrounding Brandenburg region for several years. His research shows that half of Berlin's bee species are endangered or have disappeared. The cause of the decline has been linked to habitat loss.

Unlike honeybees, which are well adapted to human-made hives, wild bees prefer sandy ground, rotting wood, and abandoned buildings. Wild bees also prefer open fields and undeveloped land for habitat. Some species, like the longhorn bee, are found only in Berlin. The longhorn bee is adapted to a particular type of flower. However, urbanization is spreading into the habitats of Berlin's 322 known species of wild bees (Mehr Bienen für Berlin, n.d.) An increasing population of humans in Berlin means an increased demand for housing.

Undeveloped land is related to climate change because the open fields absorb water from heavy rainfall. Changing weather patterns have brought increased rainfall to Berlin. Loss of natural runoff buffers could lead to street and river flooding. The roots of plants favored by wild bees effectively hold soil in place, reducing soil loss into sewers and waterways. The open spaces around Berlin act as sponges and thus reduce the impact of increased rainfall.

Finding the balance between human needs and the needs of other species has required compromises. An abandoned military base on the outskirts of Berlin has been one of Christoph Saure's study fields. The land is scheduled for development for a housing project. According to a news report by *Deutsche Welle*, after consideration of the benefits of open space for biodiversity preservation and rainfall runoff control, a decision was made to develop 60 percent of the space and leave 40 percent as green space ("<u>Saving Berlin's Threatened</u> Bees," 2016).

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Evaluate

- Identify examples of sustainable practices used by the garden and beekeepers.
- Explain why your examples represent sustainable practices.

Add examples of sustainability actions that you identified to your *Chart of Berlin's*

Sustainability Goals.