

Honey Bee Initiative



Providing Opportunities for GMU
to Join in World–Changing Efforts



New Century College

Connecting the Classroom to the World

Preparing students to address pressing social questions and global challenges through innovative, experiential, and sustainable means.

The Mason *IDEA*

Innovative

An on campus apiary field station connects students from all colleges to nature and society, locally and globally, giving opportunities to understand, analyze, and present solutions to complex, real-world challenges

Diverse

The GMU Honey Bee Initiative is multidisciplinary, multicultural, multilingual and includes educators and students from a truly global perspective

Entrepreneurial

Improve individual and community economic opportunities through education and reciprocal partnerships.

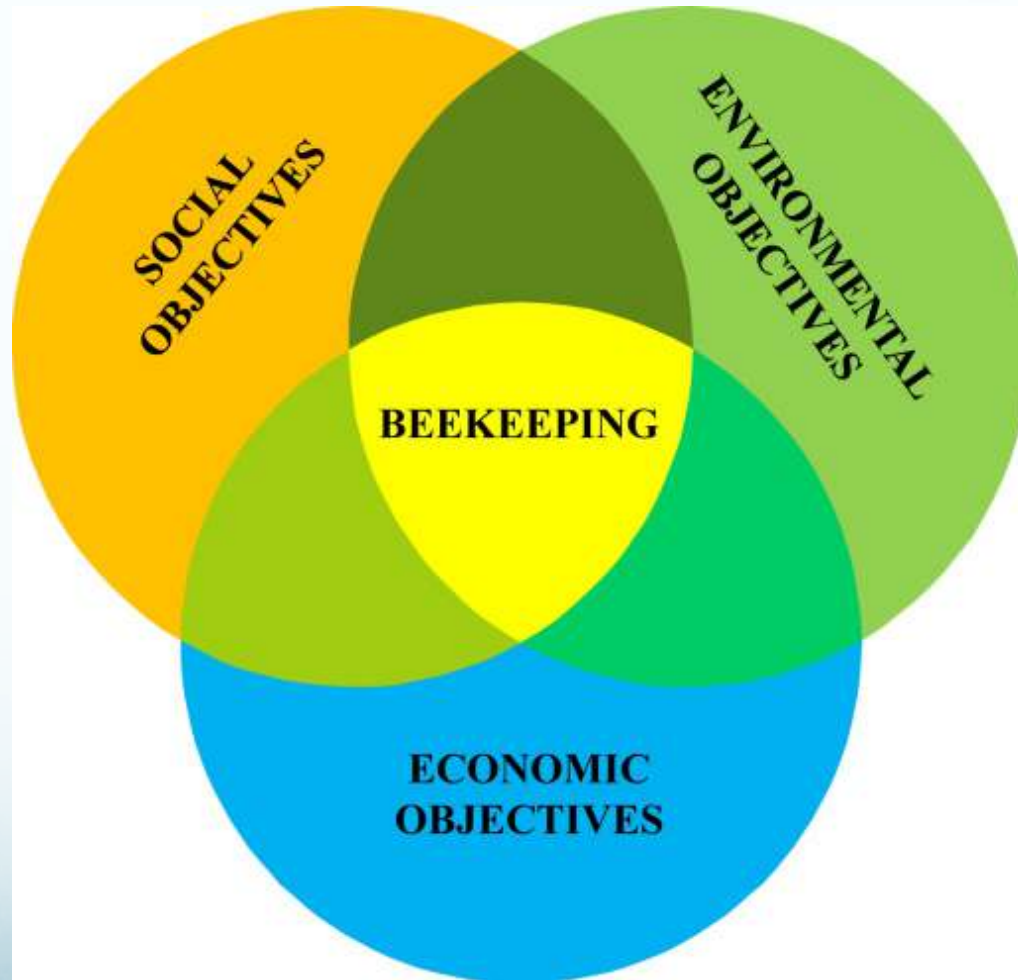
Accessible

The beekeeping program offers opportunities on campus, in our community, the region and throughout the world.

If you eat, you depend on bees.



Beekeeping Project





How is it over there?

What do people eat in the
Amazon?



































How do people travel in the jungle?





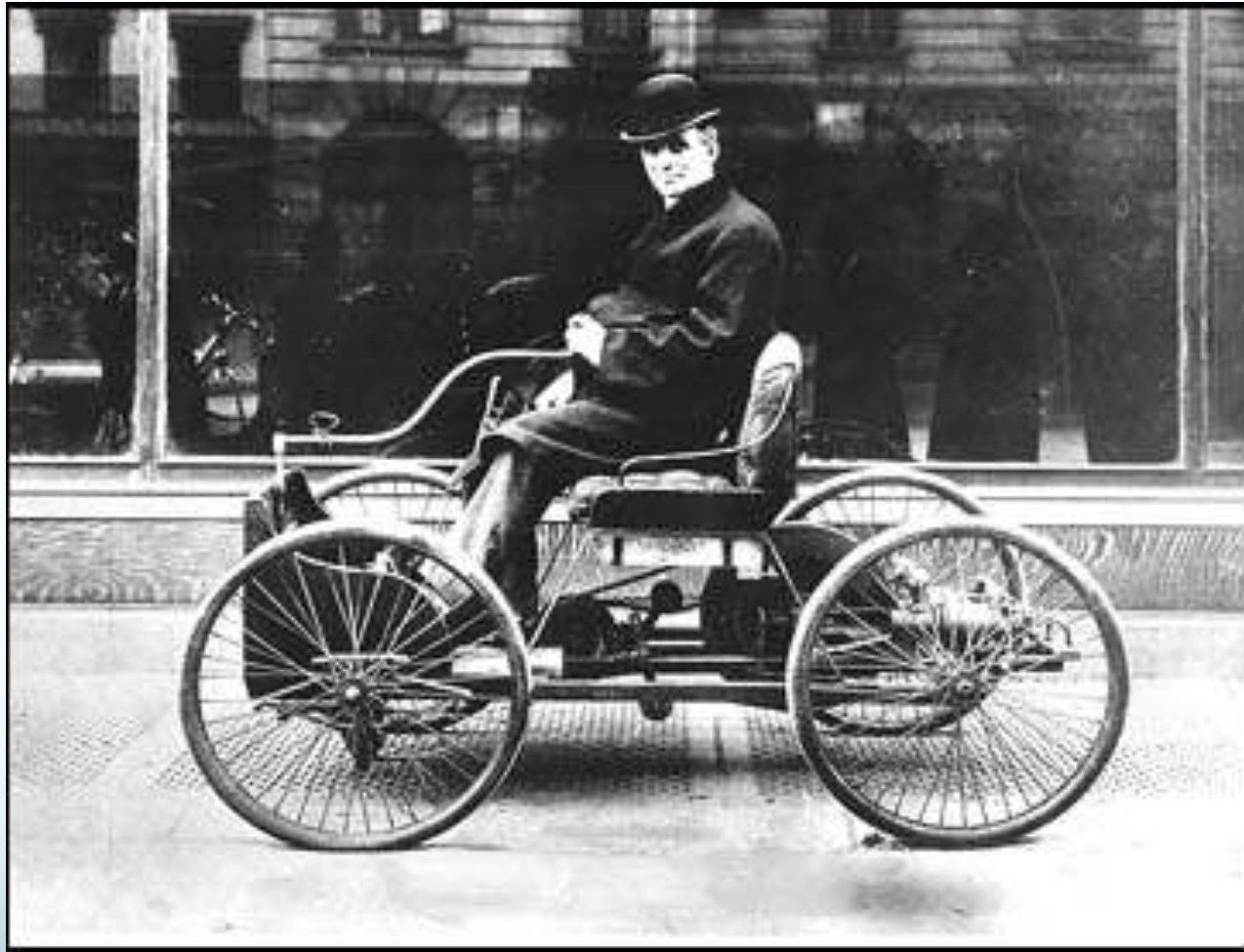






An aerial photograph of a vast, dense Amazon rainforest. The canopy is a thick, vibrant green, with numerous tall trees visible as vertical lines rising from the forest floor. The perspective is from directly above, looking down on the endless expanse of the jungle.

What event in history changed the Amazon forever?





























CUIDADO!
PROFUNDIDAD
MIN. 1.10 mts.
MAX. 1.50 mts.







THREATS



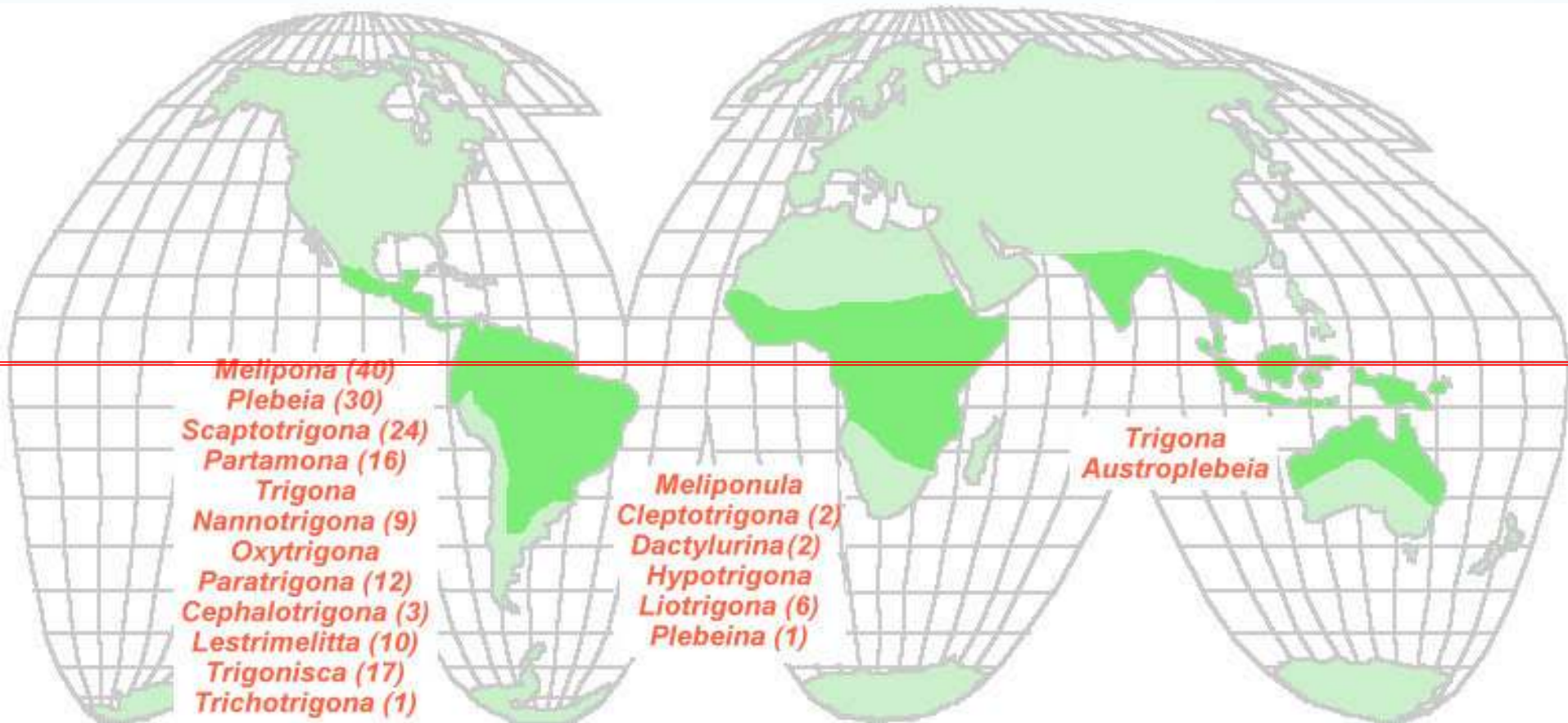








Stingless Bees Geographical Distribution





Mirim-preguiça
(*Friesella schrottkyi*)



Marmelada amarela brava
(*Frieseomelitta varia*)



Guaraipo
(*Melipona bicolor*)



Manduri
(*Melipona marginata*)



Mandaçaia
(*Melipona quadrifasciata*)



Uruçu
(*Melipona scutellaris*)



(*Melipona seminigra*)



Jandaíra
(*Melipona subnitida*)



Irai
(*Nannotrigona testaceicornis*)



Jatai-da-terra
(*Paratrigona subnuda*)



Mandaguari amarela
(*Scaptotrigona xanthotricha*)



Boca-de-sapo
(*Partamona helleri*)



Borá
(*Tetragona clavipes*)



Canudo
(*Scaptotrigona depilis*)



Irapuá
(*Trigona spinipes*)

Stingless Bee Example of Diversity

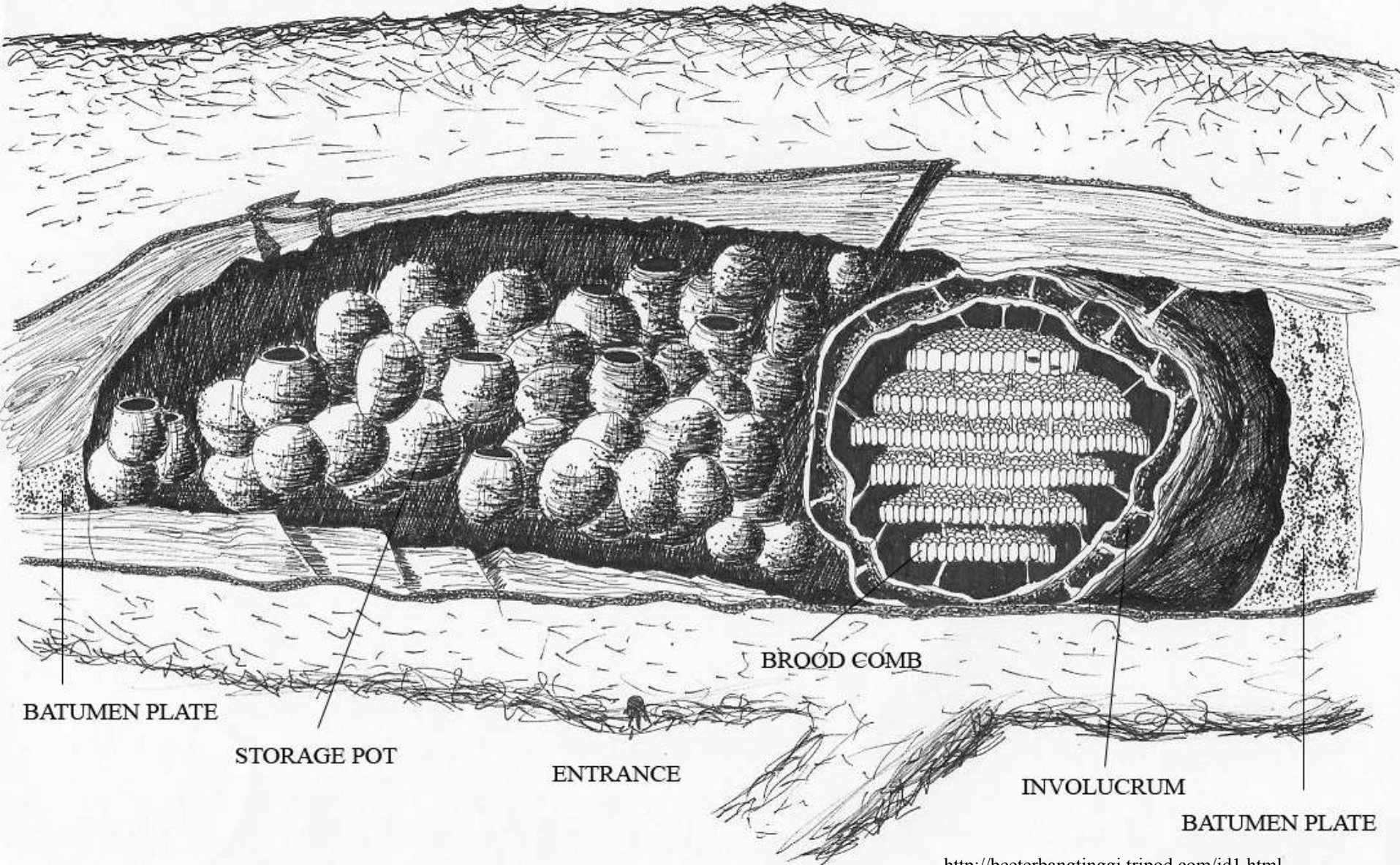


Melipona fuliginosa
Largest honey producing
stingless bee 13mm



Trigonisca Duckei
The smallest honey
producing stingless bee 2mm

Nest Structure of the Stingless Bee Species













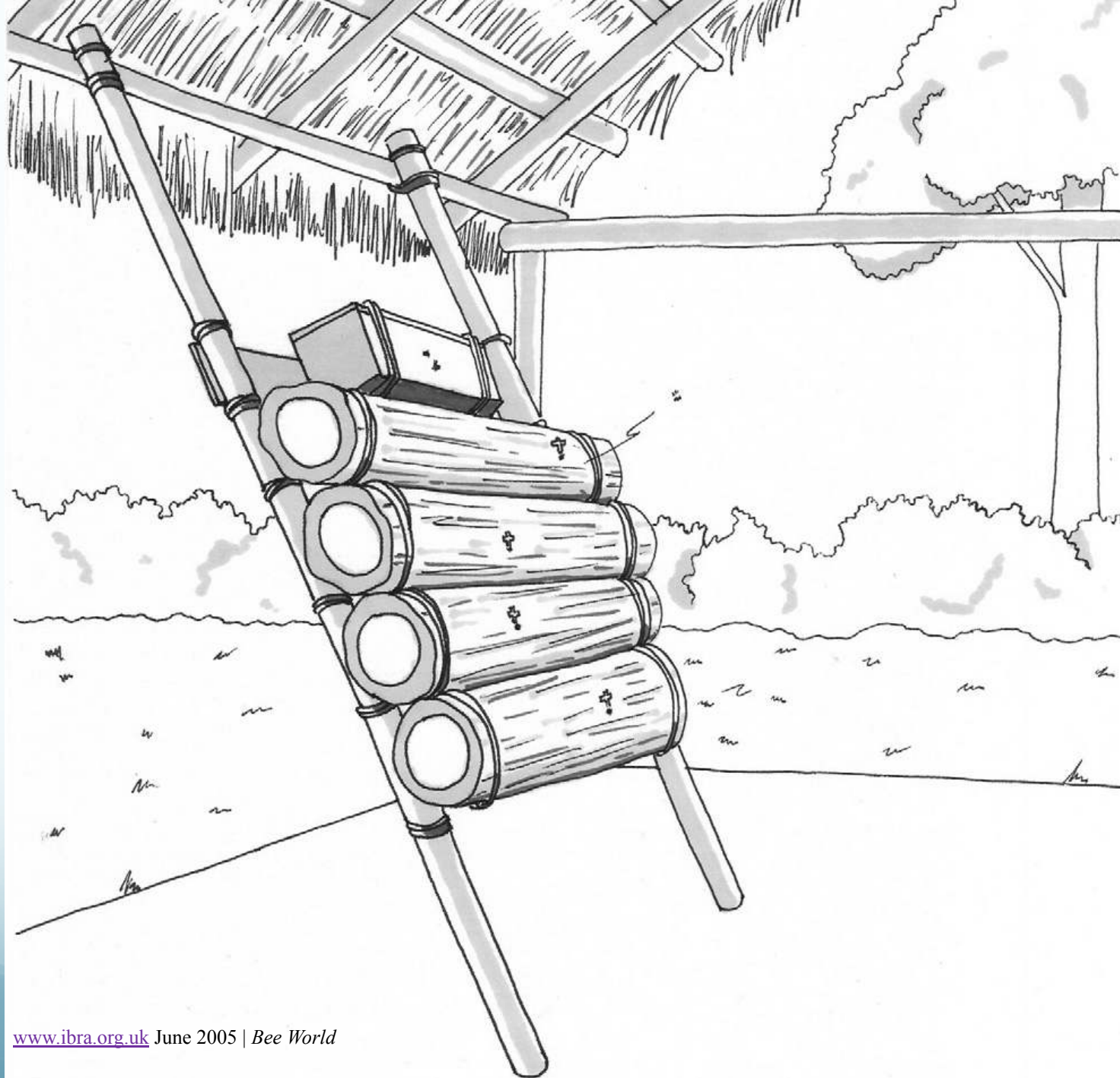




© 2012 Anne Dollin























Iquitos

Tamshiyacu

Rio Amazon



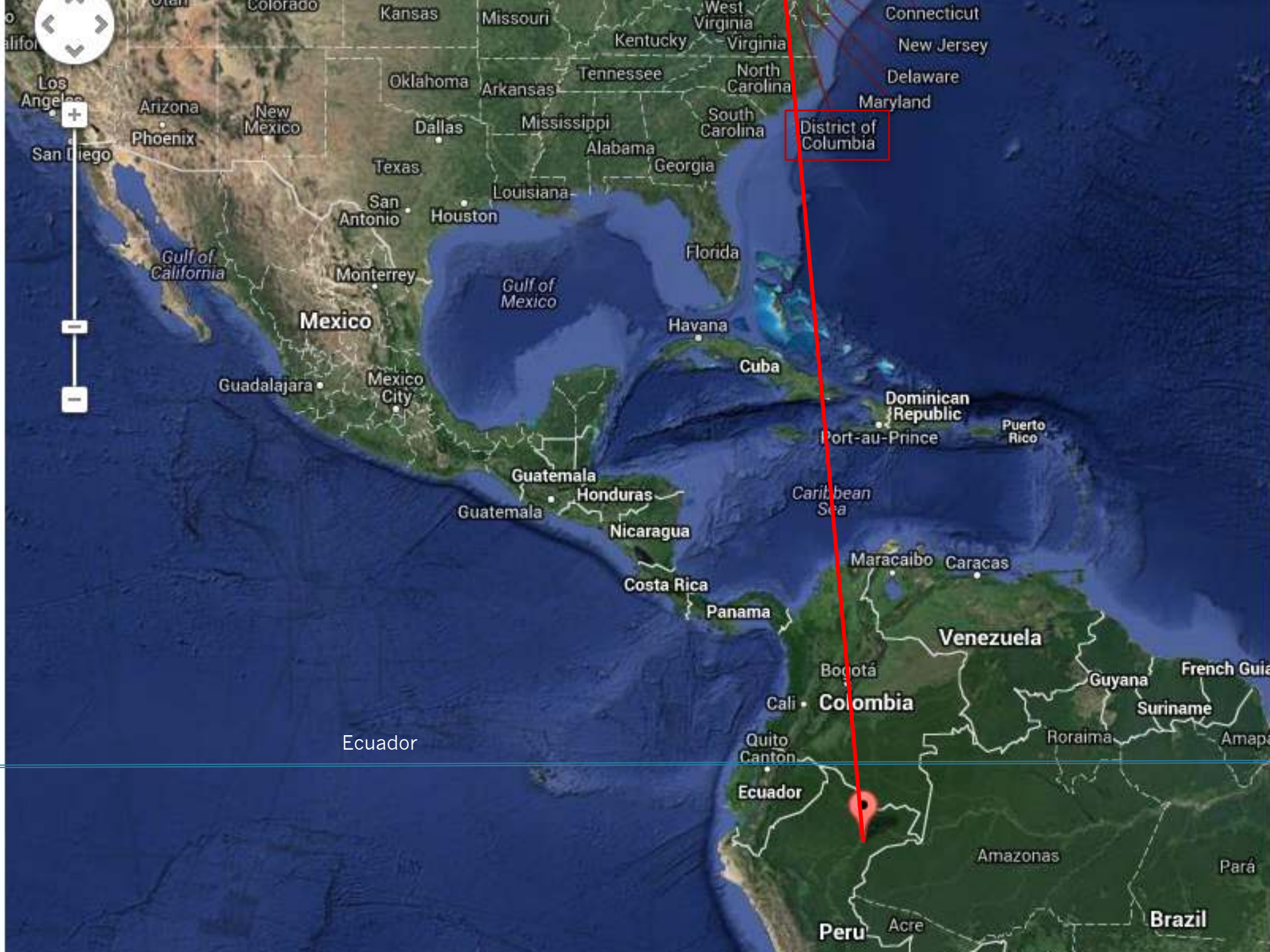
Chino Community

Community Driven Development (CDD)

Is a development initiative that provides control of the development process, resources and decision making authority directly to community groups. The underlying assumption of CDD projects are that communities are the best judges of how their lives and livelihoods can be improved and, if provided with adequate resources and information, they can organize themselves to provide for their immediate needs.



Using Beekeeping as a Sustainable Development Tool in Amazonian Communities































































































































































Together we can make our world brighter



Thank You

