

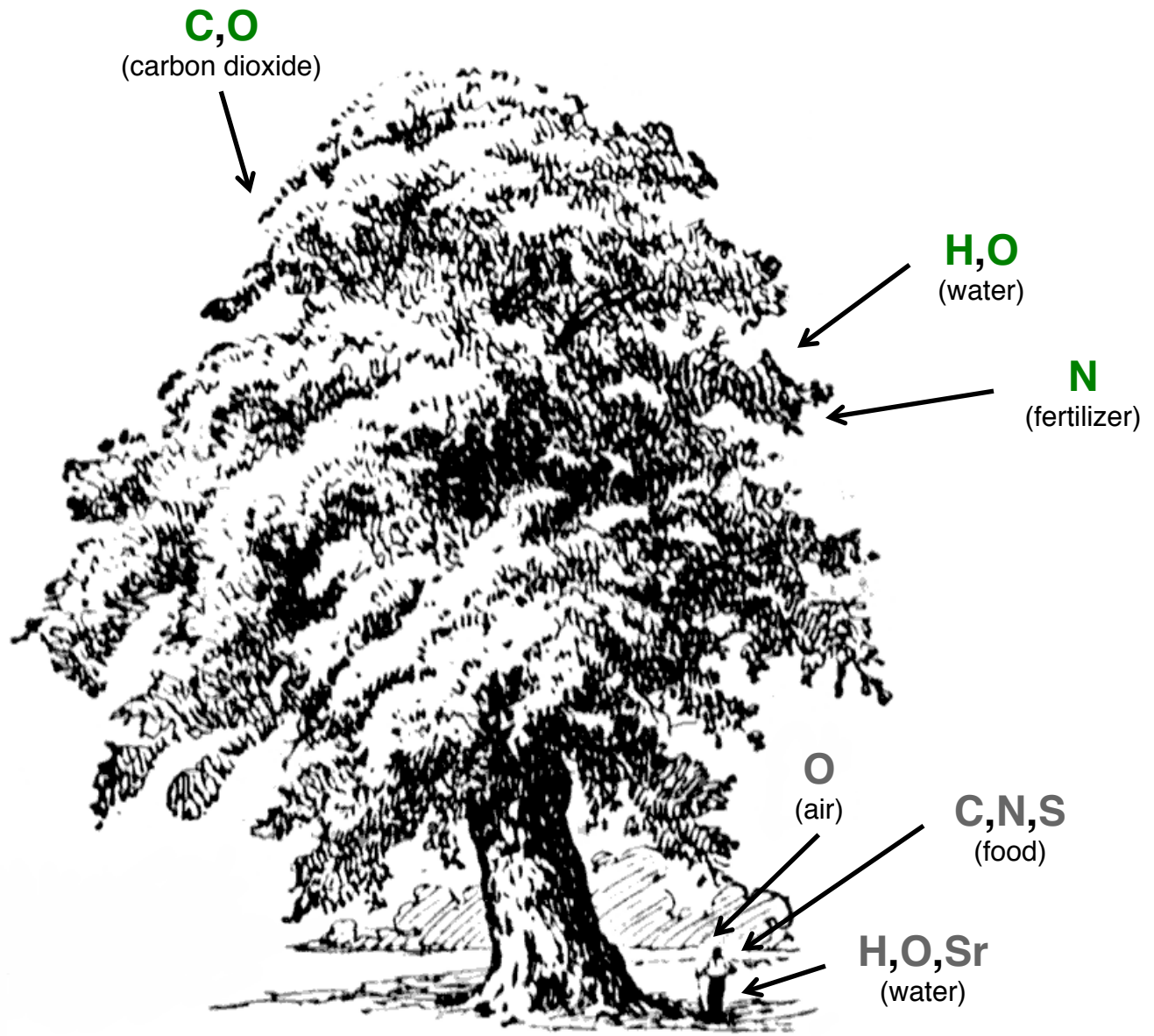
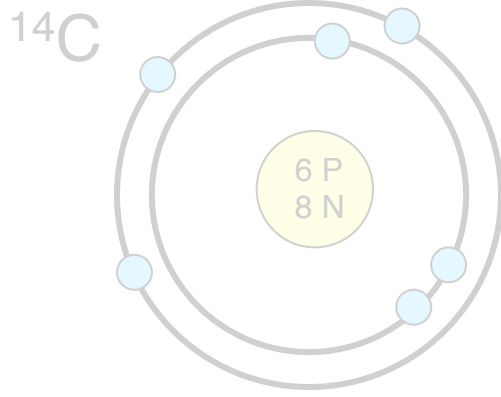
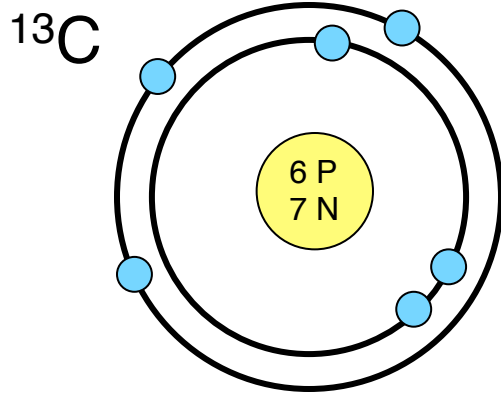
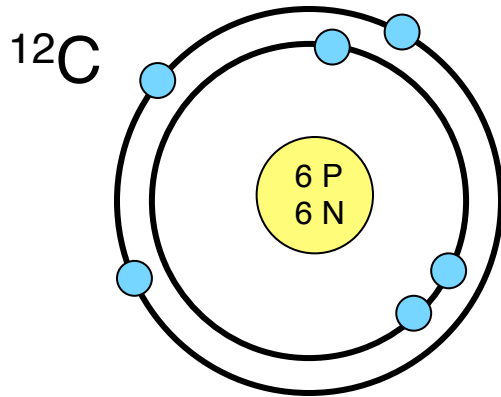
# Forensic applications of stable isotope analysis

Lesley Chesson – President, IsoForensics Inc.

- Isotopes are used to characterize a material – “isotopic signature”
- Signatures can distinguish materials that are *chemically* identical
- Provide information about:
  - Diet
  - Location
  - Manufacture/growth

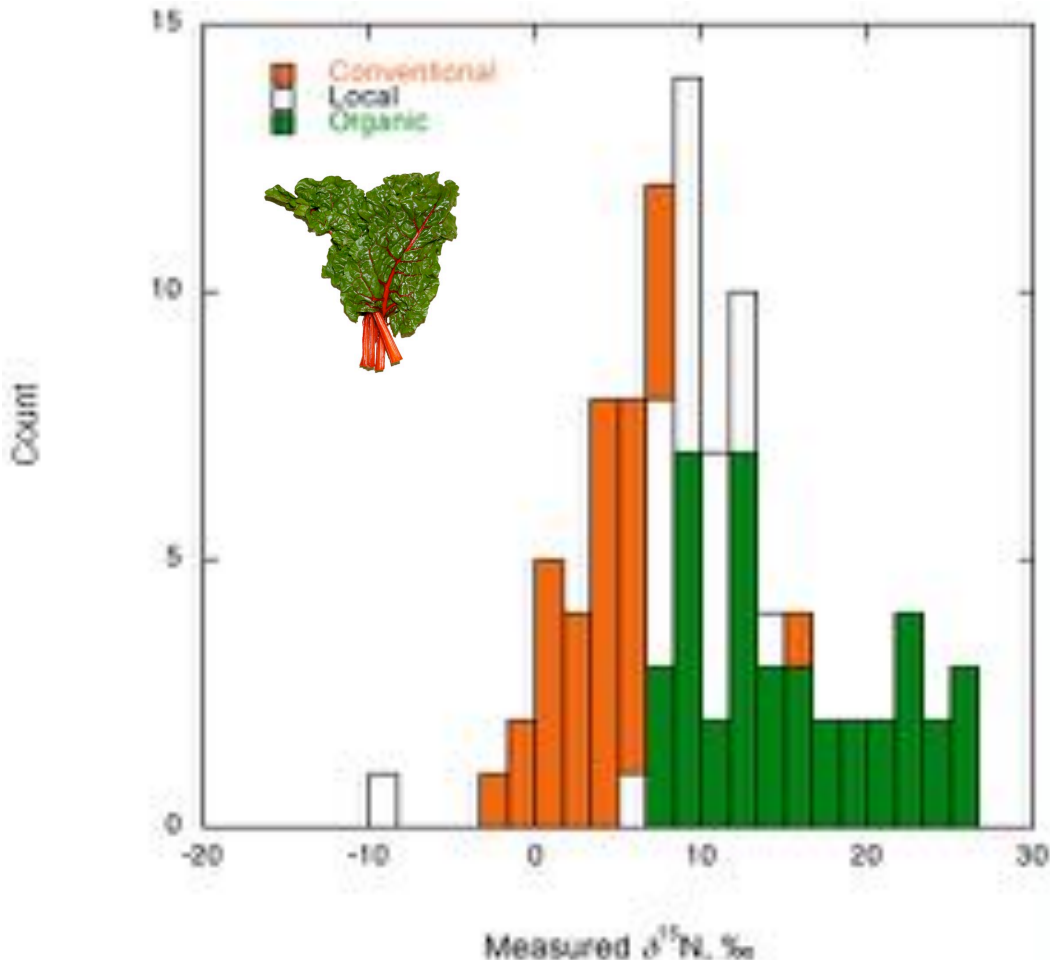


# Isotopes record info about origin & production



# Example food applications for stable isotopes

Data collected by students in *Ecological Principles of Organic Gardening*, 2011



- Is it honey or corn syrup?
- Can I verify this is not-from-concentrate juice?
- Where was my coffee grown?
- Is that beef really grass fed?
- Is this vanilla “all natural”?
- Where was the water bottled?
- How do I know those are “organic” eggs?
  
- What did historic human populations eat?
  
- Have another idea? Let’s talk!

Lesley Chesson  
[lesley@isoforensics.com](mailto:lesley@isoforensics.com)  
801-755-7990