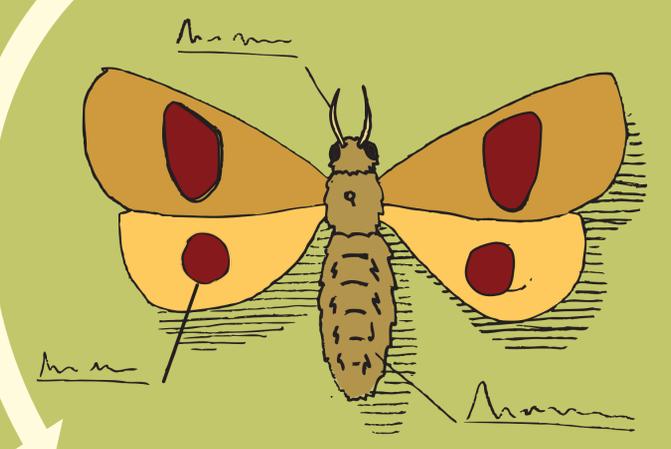
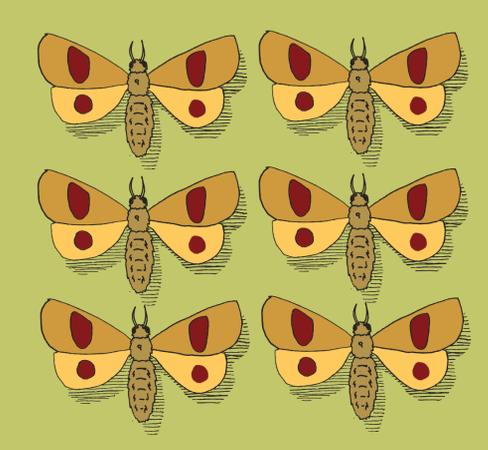
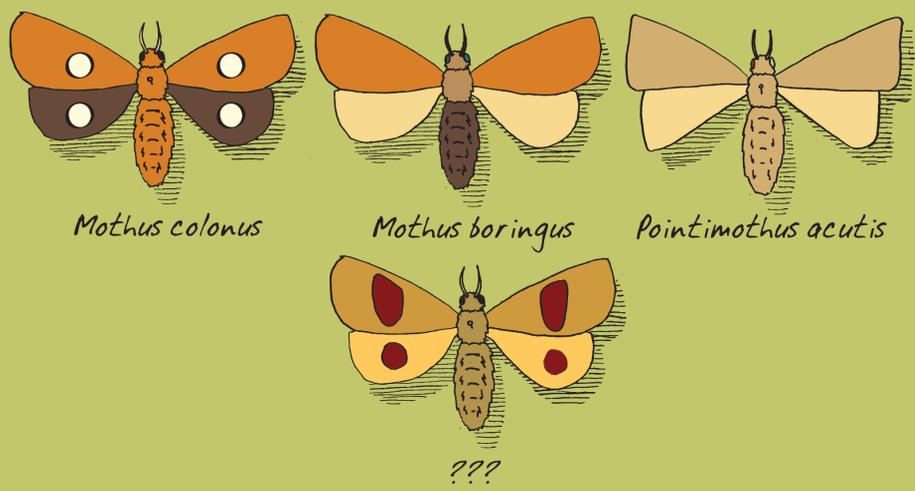
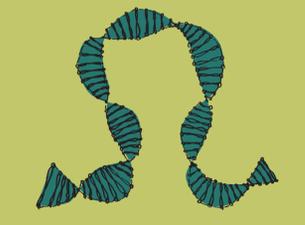


- 1 It begins with something different...
- 2 Then compare, observe, and read, read, read....
- 3 Borrow specimens from other institutions.
- 4 Determine how it is different.



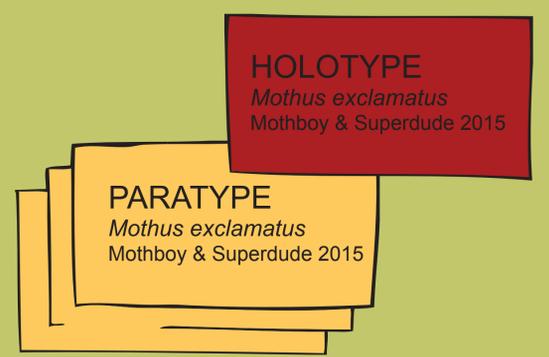
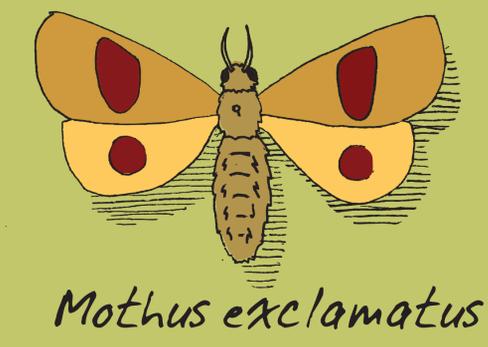
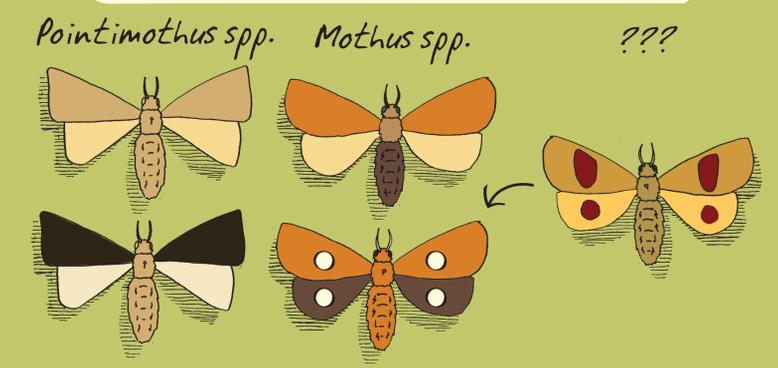
- 5 Compare DNA with similar species.



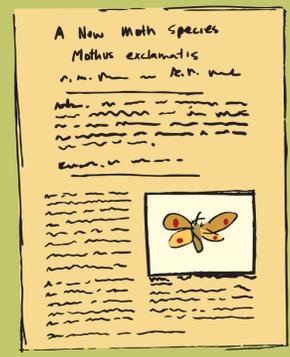
- 6 Where it live and what does it do?



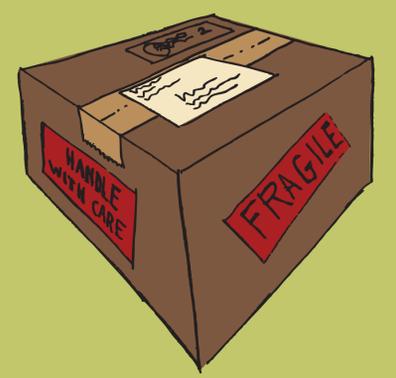
- 7 Where does it belong?



- 8 Name it!
- 9 Assign types.
- 10 Publish your work.



- 11 Return borrowed specimens.
- 12 Celebrate! ...Then find something that is different...



The Never Ending Story of Taxonomy

JJ Dombroskie Dan Olmstead Amanda Roe
 jjd278@cornell.edu dlo6@cornell.edu amanda.roe@canada.ca



1. Find something that looks different from what you know. 2. Study the literature and insect collections for descriptions/type specimens of every similar species. 3. If you are sure it is different, go get more specimens through collecting and borrowing. 4. Write a diagnosis of the least number of characters to separate it from similar species. Describe traits of both sexes (if possible), life stages, and variation among specimens. 5. Compare DNA to close relatives (if possible). 6. Describe where it lives and what it does. 7. Provide justification for which genus you think it belongs in. 8. Name the species! Use a name that is unique and follows the ICZN. 9. Pick the archetypal specimen and designate it the holotype - label it with a red label. Label a series of other specimens as paratypes. These get yellow or blue labels. 10. Publish the species description in a peer-reviewed scientific journal. 11. Return borrowed specimens and disperse paratypes to public institutions. 12. Celebrate! It has been a long few months/years. One down millions more to go.