Showcase of Nova Scotia Fossils & Geology - Jurassic Fossils

Dr. Neil Shubin, University of Chicago. Original seminar was recorded on April 17, 2020.

Introduction
- 1:30 Introductions: Tim Fedak, Luke Allen and Dr. Neil Shubin
1:30 - 3:00 Background Context: 1983 and Triassic/Jurassic Transition
3:00 - 6:00 Geologists and Nova Scotians, Paul Olsen and Eldon George

Presentation Part 1 - Nova Scotia and Newark Supergroup
6:00 - 9:00 Geology overview (Newark Supergroup), planning fossil expeditions.
9:00 - 10:00 Dr. Paul Olsen, geology studies and collaboration
10:00 - 15:00 Tides near Parrsboro and early discoveries in unexpected places.
15:00 - 18:00 Fossil skeletons: Sphenodontians (lizards) and Trithelodonts, Protosuchus, and dinosaur footprints.

18:40 - 21:45 Discussion: Fundy Geological Museum, Fossil Protection (Special Places Legislation) and importance of rift basin geology.

Presentation Part 2 - Tiktaalik and Fist to Tetrapod transition
26:45 - 28:45 Initial work and discovery.
28:45 - 29:45 Tiktaalik - transition fins to limbs.
29:45 - 31:00 Additional and future work coming up.

Student Questions and Dr. Shubin Answers
31:00 - 33:20 When did you know you wanted to become a palaeontologist? Volunteering at museums and early learning.
33:20 - 35:00 Where else have you worked around the world? Morocco, Greenland, and now all seven continents.
33:50 - 36:10 What was your favourite discovery?
35:50 - 36:20 How have you used palaeontology with other sciences? Geology and fossils, but also DNA and genomes of currently living animals, comparative anatomy, functional anatomy.
36:20 - 39:05 Teamwork and collaboration.
39:05 - 41:20 How does palaeontology help us understand or modern world? Climate change and the past, what causes extinction, and advances in studies of human disease, model organisms.
41:20 - 41:50 Thanks and Conclusion.