- " Birds of Costa Rica
- 877 different species of birds in CR
  - " 250 migrate from North to South
    - " migratory season starts Sept.
    - ' CR has many North American species
- " worldwide 333 species of hummingbird
  - " all confined to New World (New Tropics)
  - " 11 are migratory
  - " 2<sup>nd</sup> largest bird group (flycatchers = largest)
  - " eat high concentrations of nectar because need energy fastest birds in the world
  - burn lots of calories get protein and nutrients from spiders and insects
  - only birds that can fly in all direction even backwards
  - " can bring down body temperature and control metabolism (if too hot, slow down if too cold, speed up)
  - "  $30-50^{\circ}$  C = body temperature
  - " wings beat 60-80 times/sec
  - " heart can beat 1200 times/min
- " Montezuma s Oropendula
  - " oriole family
  - " one of the most common in rainforest
  - " common in Caribbean lowlands
  - " lives 2600 ft. below sea level
  - " range = South Mexico to Central Panama
  - " black bird with yellow tail
  - " big hanging nests
  - " cow birds lay eggs in their nests
    - " some eject cowbirds, some don t
    - ' if wasps and bees, they don't accept cowbird eggs
    - " if no wasps and bees, they accept cowbird eggs
    - " maggots eat baby oropendulas
    - " with sharing 9 times more likely to not get killed by bugs
    - " cowbirds help oropendulas by fighting bugs
- " CR about the size of North Carolina
- " 460 bird species in Canada and US
- " Chestnut-billed heron most beautiful heron in CR
  - " rare, very beautiful
  - " lives near long shaded streams, eats small fish and lizards
  - " usually silent
  - " nests circular platforms, flimsy 3-5 ft.
  - " nesting June-Sept.
  - " eggs bluish