- You are fishing (a scenario from Josh Goodman), and caught: • 10 carp, 3 perch, 2 whitefish, 1 trout, 1 salmon, 1 eel = 18 fish How likely is it that next species is trout? • 1/18
  - How likely is it that next species is new (i.e. catfish or bass)
  - Let's use our estimate of things-we-saw-once to estimate the new things.
    - 3/18 (because  $N_1=3$ )
  - Assuming so, how likely is it that next species is trout?

  - Must be less than 1/18
    - How to estimate?