Cambodia biodiversity paper notes – Log rank abundance plots–August 8, 2022

I calculated rank abundance at the system level (biomonitoring data), catch level and consumption level.
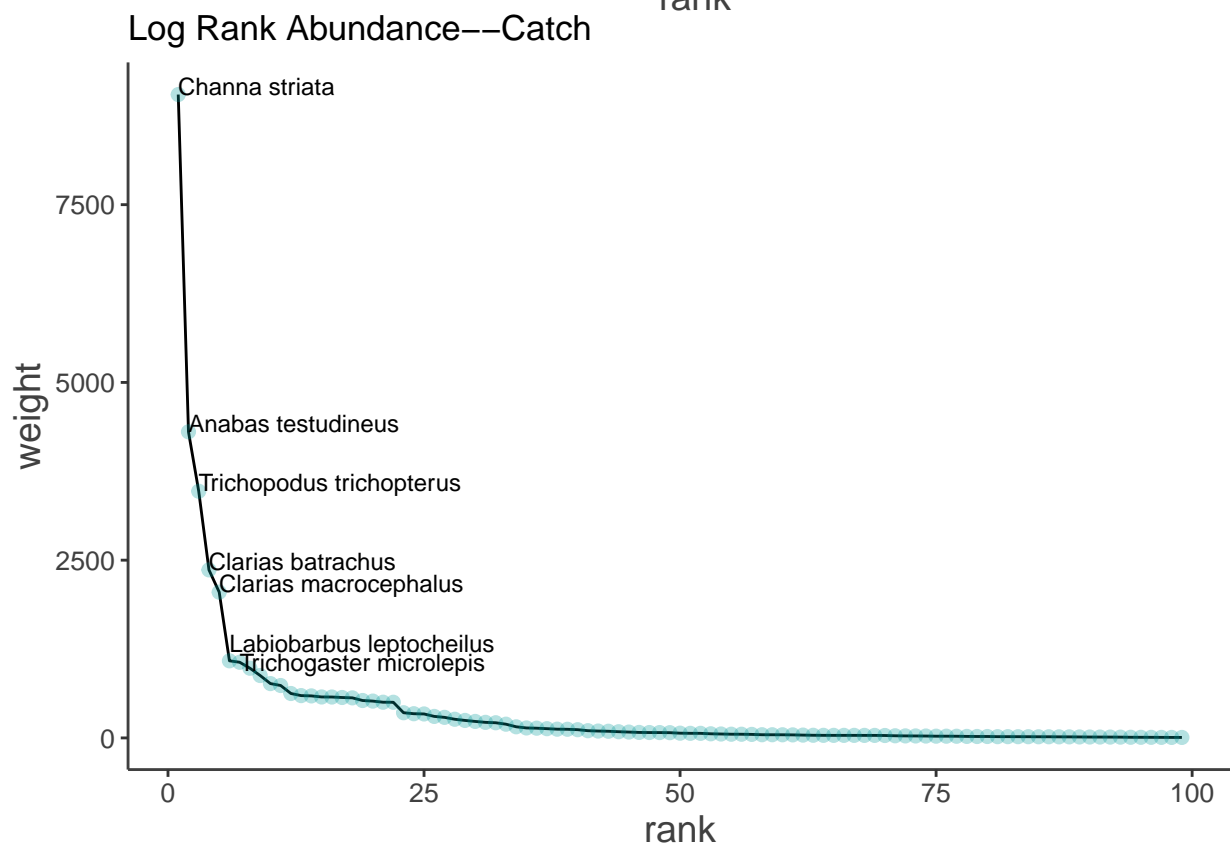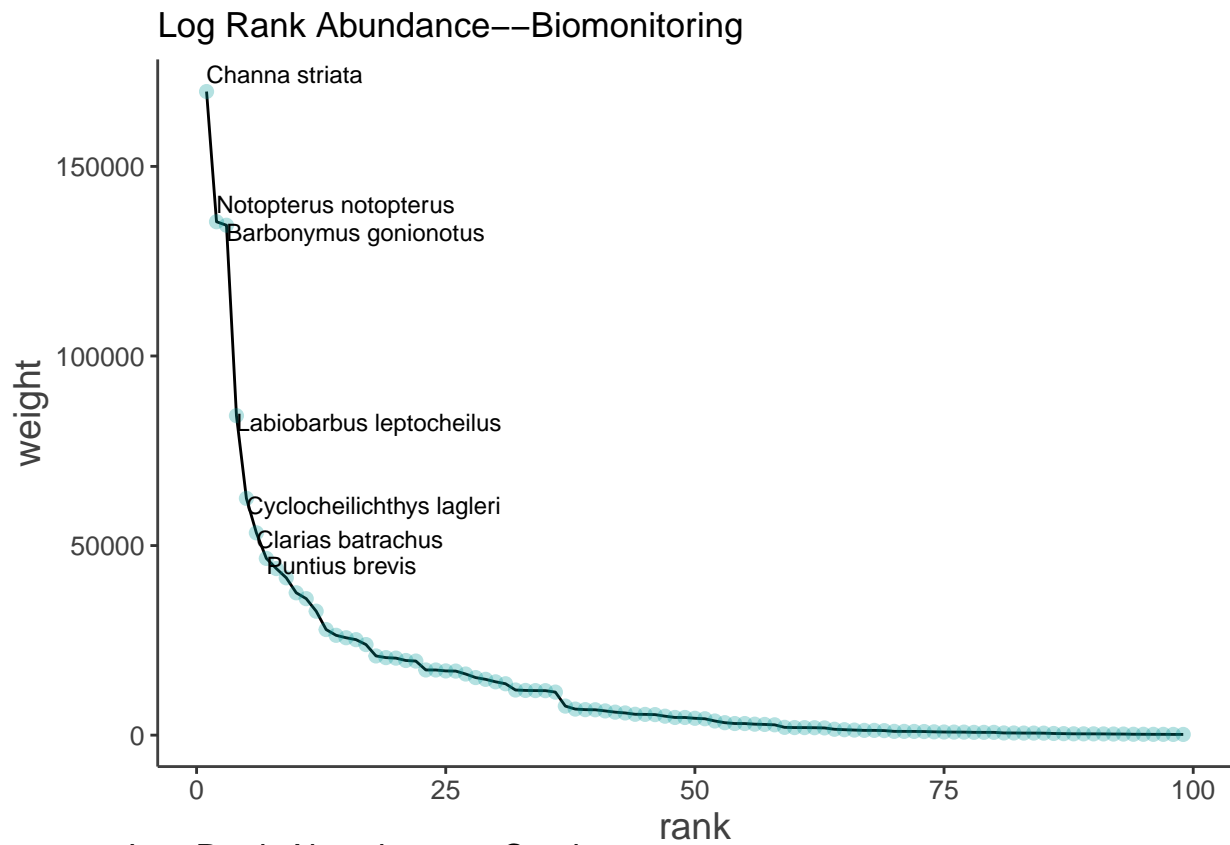
I labeled the top 7 species in each plot.

The scales are quite different, making it difficult to put them side-by-side.

I plotted only the top 70 species. This reduced the very long right tail in all plots.

The shape of the distributions are all quite similar to my eyes.

The most caught and consumed species (Channa striata) is also the most common in biomonitoring. The second most commonly caught and consumed species (Anambas testudineus) does not appear in the top 7 of biomonitoring. It could still be a very common species, but this indicates that there's some targeting going on, as expected.

The second, third and fourth most abundant species in the biomonitoring data do not appear in the top 7 of catch and consumption.

Log Rank Abundance−−Biomonitoring

Channa striata

Notopterus notopterus
Barbonymus gonionotus

Labiobarbus leptocheilus

Cyclocheilichthys lagleri
Clarias batrachus
Puntius brevis

weight

150000

100000

50000

0

0   25   50   75   100

rank

Log Rank Abundance−−Catch

Channa striata

Anabas testudineus

Trichopodus trichopterus

Clarias batrachus
Clarias macrocephalus

Labiobarbus leptocheilus
Trichogaster microlepis

weight

7500

5000

2500

0

0   25   50   75   100

rank

Log Rank Abundance––Consumption

Channa striata

Anabas testudineus

Clarias batrachus
Clarias macrocephalus
Trichopodus trichopterus

Cyclocheilichthys lagleri
Mystus albolineatus

weight

3000

2000

1000

0

0   25   50   75   100

rank