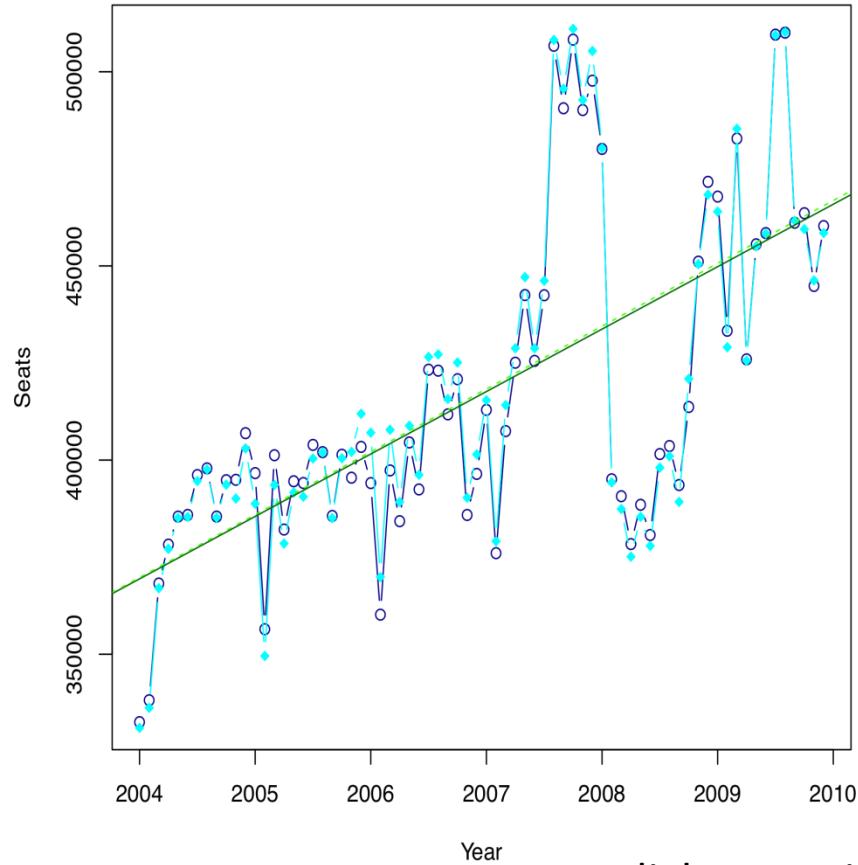


**Local conservation.
Global health.**



EcoHealth Alliance

Increasing air travel in developing countries



Flight capacity for Bangladesh 2004-10

**Local conservation.
Global health.**

(Hosseini et al., *in review*)

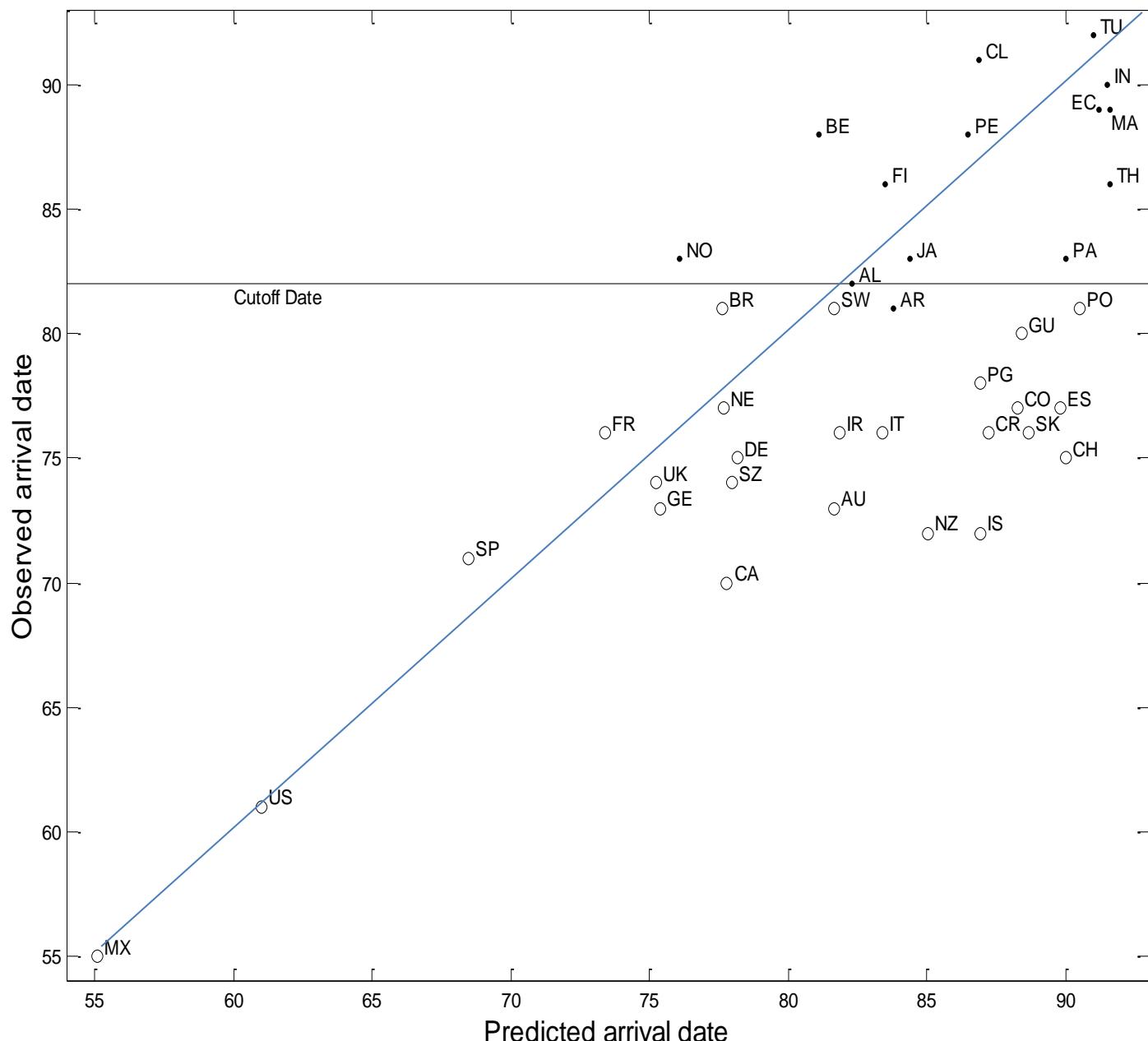


Global vulnerability index

- Calculating index
 - E_i = Jones et al. hotspots
 - C_{ij} = Est. Number of passengers
 - H_i = Healthcare spending per capita
 - i = source of risk
 - j = destination of risk
 - We then interpolate risk out from airport locations globally
 - Using Inverse Distance Weighted interpolation
- $$\phi_j = \sum_{alli} \frac{C_{ij} \cdot E_i}{H_i}$$

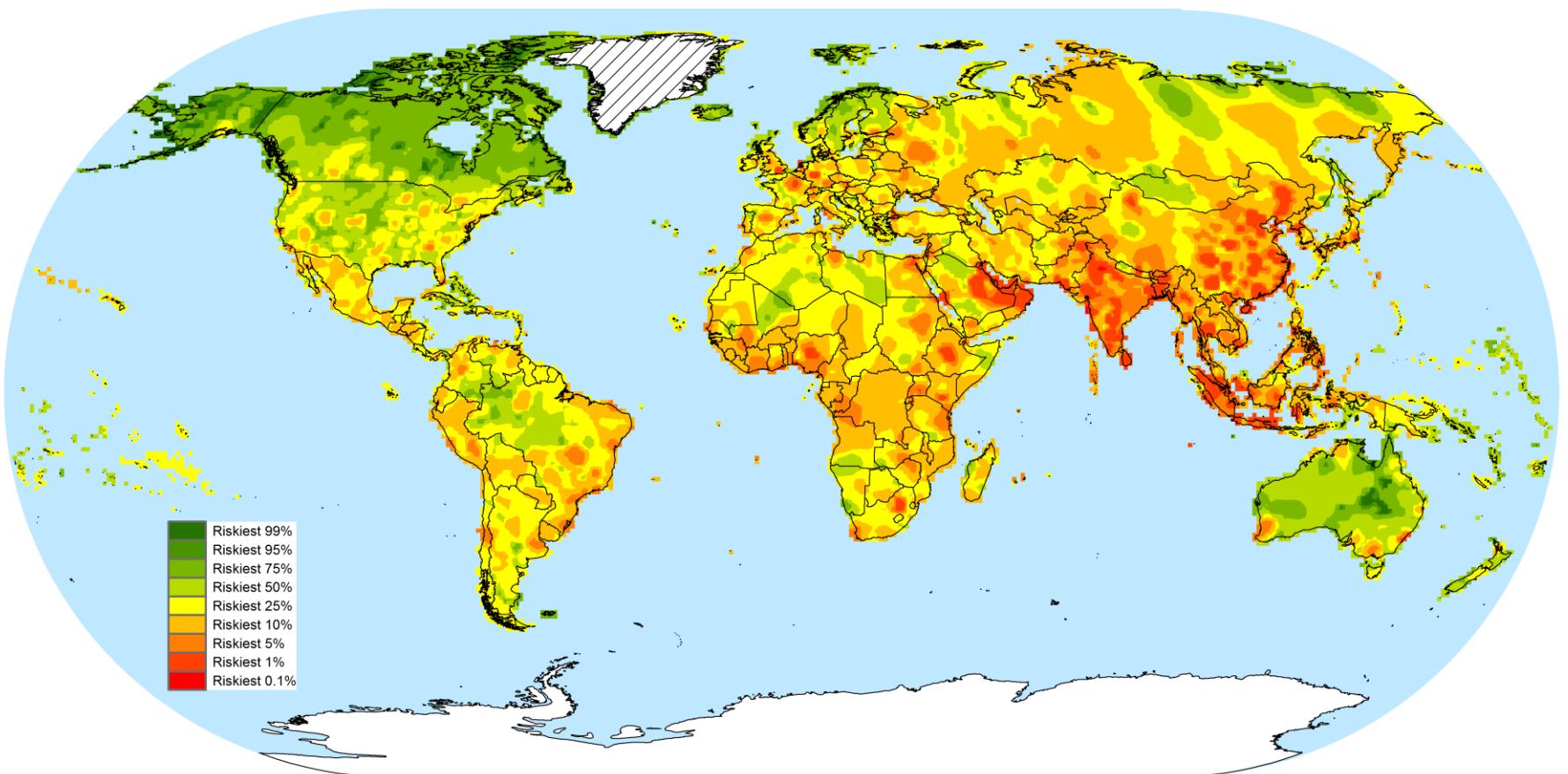
Local conservation.

Global health.

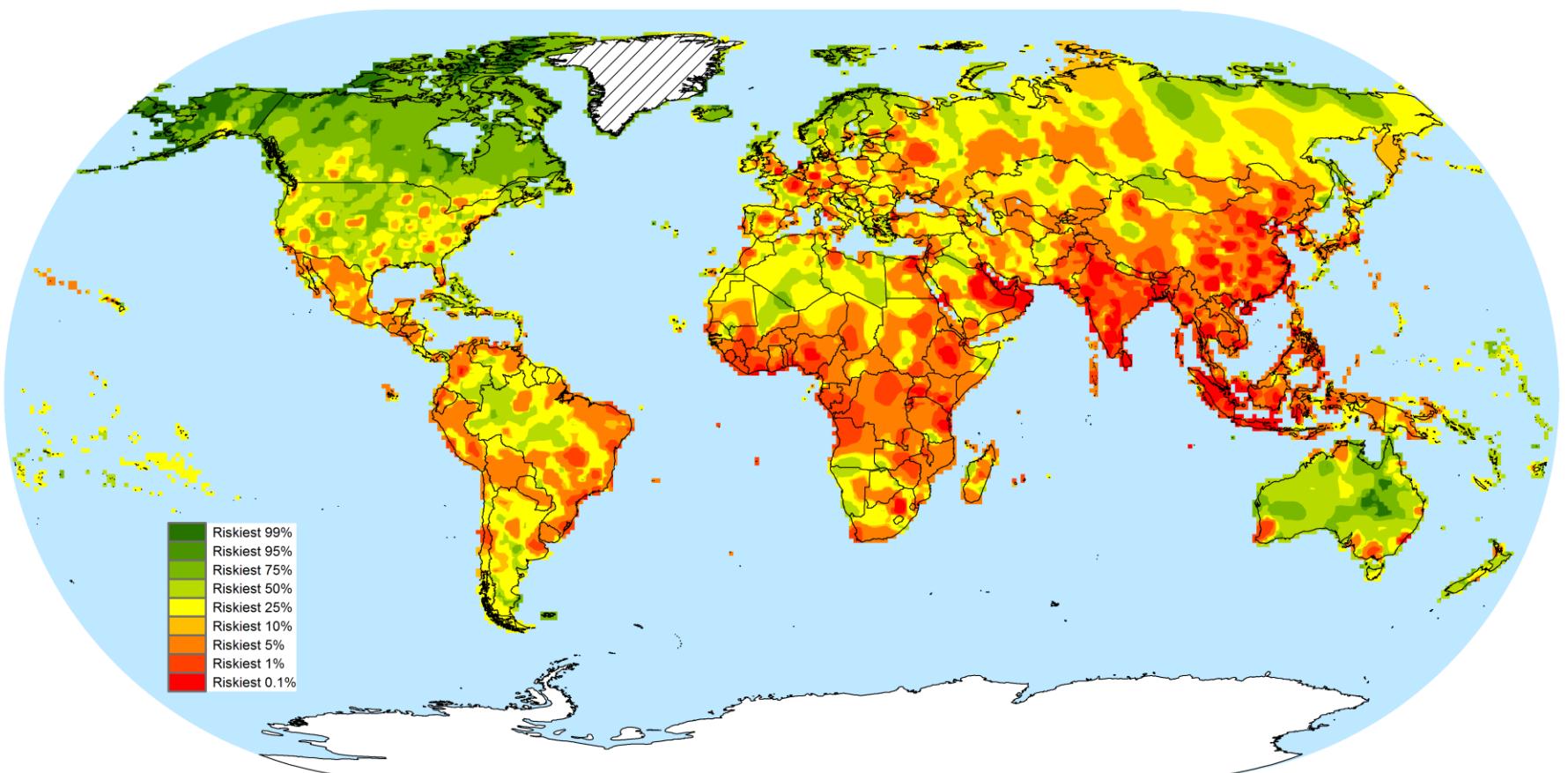


Global Vulnerability

Zoonotic EIDs



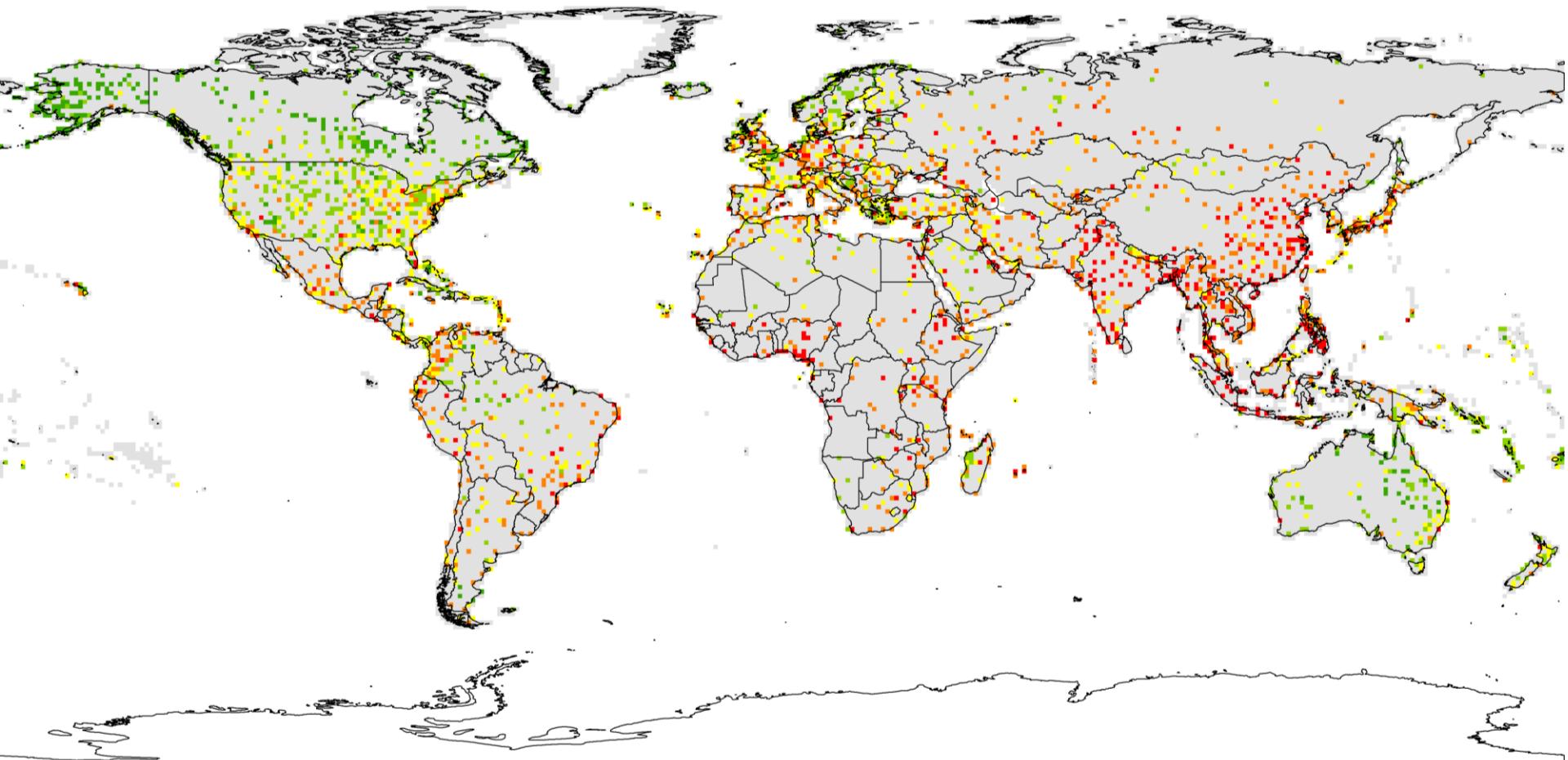
Vulnerability: Vector borne EID





EcoHealth Alliance

EID risk per airport



**Local conservation.
Global health.**

Hosseini *et al.* (in review)

Number of Individual Animals Traded by U.S. (2000-2006)



EcoHealth Alliance
CLASS

| CLASS | IMPORT | EXPORT |
|---------------|------------|-----------|
| AMPHIBIA | 27631172 | 1594961 |
| ANNELIDA | 485011 | 76737 |
| ARACHNIDA | 1175483 | 208553 |
| AVES | 1195014 | 48117 |
| CHILOPODA | 4358 | 274 |
| CNIDARIA | 3265622 | 59699 |
| CRUSTACEA | 80275054 | 2752200 |
| DIPLOPODA | 13926 | 1218 |
| ECHINODERMATA | 53351 | 634 |
| INSECTA | 4696906 | 88686 |
| MAMMALIA | 184682 | 32879 |
| MEROSTOMATA | 60 | 0 |
| MISCELLANEOUS | 5430083 | 154195 |
| MOLLUSCA | 3187671 | 555829 |
| NULL | 4017720 | 244026 |
| PISCES | 1316977591 | 138404653 |
| POLYCHAETA | 437 | 0 |
| REPTILIA | 10211806 | 35984895 |

Local conservation. TOTAL

1,458,805,947 **180,207,556**

Global health.
Smith et al. In revision for *Science*

Smith et al *Science* 2005

**8 million New Yorkers
182 pets each**

3 pets per U.S. household

