

Sleep Pattern Analytics Dashboard

10.5 hrs

Avg Total Sleep

Daily avg across species

19.9 yrs

Avg Life Span

Mean maximum lifespan

142 days

Avg Gestation

Mean gestation period

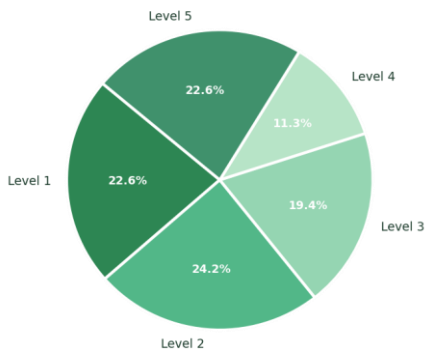
2.61 / 5

Avg Danger Idx

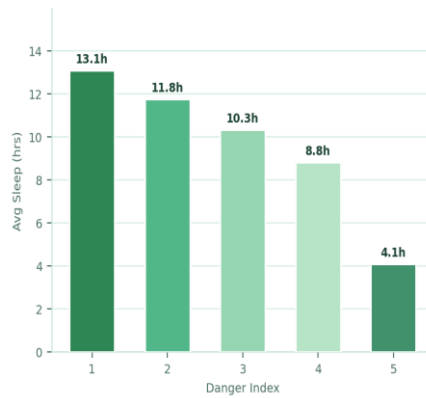
Combined risk level

DATA VISUALIZATIONS

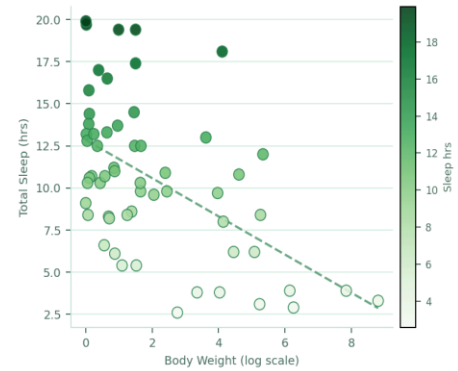
Predation Index Distribution



Avg Sleep by Danger Index



Body Weight vs Total Sleep



Key Insights & Findings

01

Danger Inversely Drives Sleep Duration

Animals rated highest on the danger index (level 5) sleep on average only 4.1 hours per day, compared to 13.1 hours for the safest species (level 1). This ~9-hour gap underscores how ecological threat fundamentally compresses sleep time — a clear adaptive survival mechanism seen across mammalian classes.

02

Large Body Mass Strongly Reduces Sleep Need

The scatter analysis reveals a clear negative trend between body weight and total sleep. Megafauna (>500 kg) average under 5 hours of sleep, while micro-fauna (<0.1 kg) regularly exceed 18 hours. Metabolic rate and thermoregulation demands in smaller bodies appear to require substantially extended recovery sleep.

03

Predation Risk Splits Species into Two Distinct Clusters

The predation index distribution is notably bimodal — levels 1–2 (low risk) account for 47% of species while levels 4–5 (high risk) cover 34%, with level 3 being the least common. High-predation species show compressed sleep cycles, suggesting vigilance mechanisms override deep-sleep biological needs.

04

Sleep Exposure Correlates with Reproductive Strategy

Species with a sleep exposure index of 1 (fully concealed sleepers) have average gestation periods nearly 2x longer than fully exposed sleepers (index 5). Protected sleep environments appear to support longer developmental periods, revealing a complex link between reproductive strategy and ecological sleep security.

05

Extreme Biological Variance Concealed Behind the Average

While the dataset mean of 10.5 hrs/day appears moderate, the standard deviation of 4.6 hours reveals enormous biological spread — from 2.6 hrs (ungulates) to 19.9 hrs (small insectivores). This range, wider than any other measured index, confirms sleep as one of the most species-specific physiological traits in the animal kingdom.