

Hampton Roads Itch Index (0–10)

A simple, UV-style mosquito nuisance signal for parks and green spaces

Datathon 2025 Submission

Team: CDJ

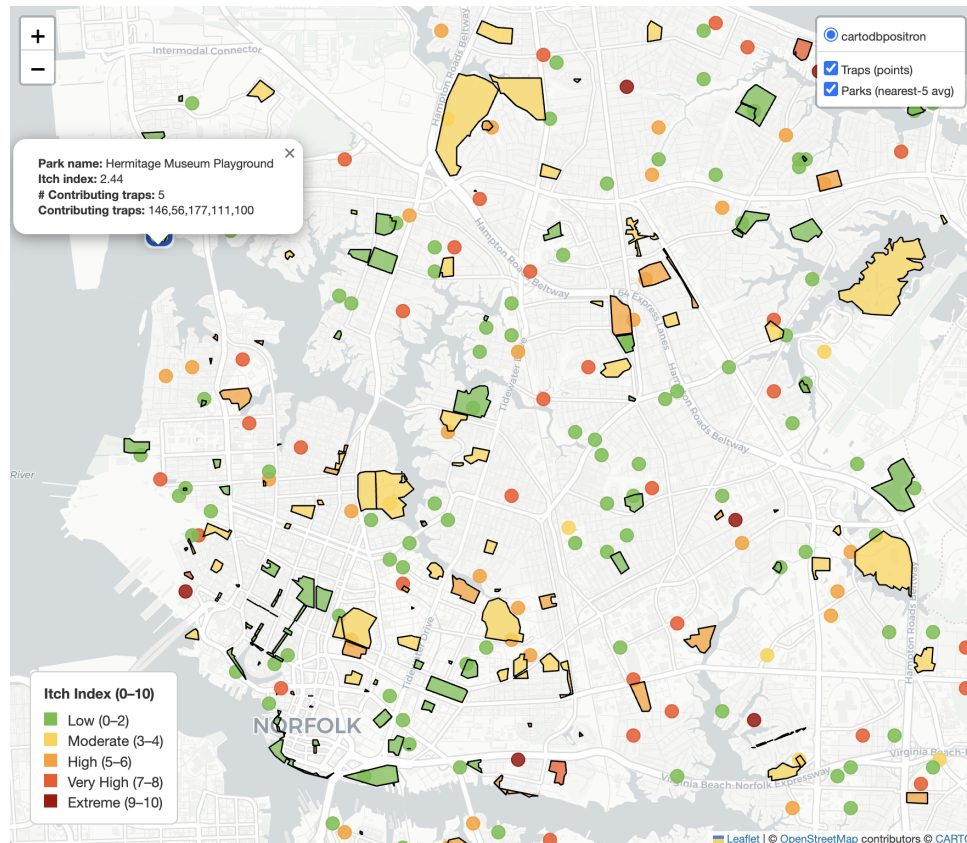


Figure 1: Interactive Itch Map (click image). Full report can be found [here](#).

Why this matters

Mosquito nuisance is local and changes fast. Residents, Parks & Rec, and event planners need a clear, timely signal to choose protection & plan operations.

What we built

A stable, readable **0–10 Itch Index** derived from mosquito trap counts, published on a public, park-centric map. Different traps and species are normalized so the number is comparable across sites & wks.

What the number means

- **0–2 Low** — enjoy parks normally
- **3–4 Moderate** — repellent at dusk/dawn
- **5–6 High** — repellent + socks/long sleeves near vegetation
- **7–8 Very High** — avoid marsh-edge trails at dusk; caution for outdoor events
- **9–10 Extreme** — strong protection; consider advisories

Who uses it

- **Public:** simple daily guidance for parks and trails
- **Event organizers:** plan evening timing and patron messaging
- **Operations:** prioritize surveillance and treatment where risk stays high

Action statement

- **Publish weekly** Itch Index to Parks & Rec and event planners
- **Trigger ops:** prioritize sites that remain > 7 for two consecutive weeks
- **Targeted outreach:** emphasize daytime protection when day-biting species dominate