

Reporting Summary

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Statistical parameters

When statistical analyses are reported, confirm that the following items are present in the relevant location (e.g. figure legend, table legend, main text, or Methods section).

n/a Confirmed

- ☐ ☒ The exact sample size (n) for each experimental group/condition, given as a discrete number and unit of measurement
- ☐ ☒ An indication of whether measurements were taken from distinct samples or whether the same sample was measured repeatedly
- ☐ ☒ The statistical test(s) used AND whether they are one- or two-sided
Only common tests should be described solely by name; describe more complex techniques in the Methods section.
- ☐ ☒ A description of all covariates tested
- ☐ ☒ A description of any assumptions or corrections, such as tests of normality and adjustment for multiple comparisons
- ☐ ☒ A full description of the statistics including central tendency (e.g. means) or other basic estimates (e.g. regression coefficient) AND variation (e.g. standard deviation) or associated estimates of uncertainty (e.g. confidence intervals)
- ☐ ☒ For null hypothesis testing, the test statistic (e.g. F , t , r) with confidence intervals, effect sizes, degrees of freedom and P value noted
Give P values as exact values whenever suitable.
- ☒ ☐ For Bayesian analysis, information on the choice of priors and Markov chain Monte Carlo settings
- ☒ ☐ For hierarchical and complex designs, identification of the appropriate level for tests and full reporting of outcomes
- ☐ ☒ Estimates of effect sizes (e.g. Cohen's d , Pearson's r), indicating how they were calculated
- ☐ ☒ Clearly defined error bars
State explicitly what error bars represent (e.g. SD, SE, CI)

Our web collection on [statistics for biologists](#) may be useful.

Software and code

Policy information about [availability of computer code](#)

Data collection

All data were collected in the field by the authors

Data analysis

All data were analysed in R, and we wrote a custom code in C++ to extract color values from digital images of animals.

For manuscripts utilizing custom algorithms or software that are central to the research but not yet described in published literature, software must be made available to editors/reviewers upon request. We strongly encourage code deposition in a community repository (e.g. GitHub). See the Nature Research [guidelines for submitting code & software](#) for further information.

Data

Policy information about [availability of data](#)

All manuscripts must include a [data availability statement](#). This statement should provide the following information, where applicable:

- Accession codes, unique identifiers, or web links for publicly available datasets
- A list of figures that have associated raw data
- A description of any restrictions on data availability

The data that support the findings of this study are available from the corresponding author upon request.

Field-specific reporting

Please select the best fit for your research. If you are not sure, read the appropriate sections before making your selection.

☐ Life sciences

☐ Behavioural & social sciences

☒ Ecological, evolutionary & environmental sciences

For a reference copy of the document with all sections, see [nature.com/authors/policies/ReportingSummary-flat.pdf](https://www.nature.com/authors/policies/ReportingSummary-flat.pdf)

Ecological, evolutionary & environmental sciences study design

All studies must disclose on these points even when the disclosure is negative.

Study description

We conducted a field experiment where we compared multiple parameters in areas with (n=3 WT study areas) and without windturbines (n = 3 NWT study areas). Each study area was approximately 0.5 km². We controlled for geography by selecting replicate sites on the same plateau where windturbines (main treatment effect) have been in the same locations for at least 16-20 years. All data were collected over two years, in the peak activity season for lizards (March to June). For land-cover measures, we analysed remote sensed data for the entire plateau. For substrate type analysis, we analysed 10 sampling plots (1x1m) in each of the 6 study areas (N=60 plots total). For avian predator abundance, we walked 4 (3 hour long) transects a month for 8 months, where half the transects were in the morning and the other half were in the evening. For raptor predation events, we conducted 32 vantage point counts (3 hour observation periods each) over 8 months. For lizard density measures, we walked 30 belt transects in WT areas and 39 in NWT areas and recorded all lizards seen. Parallel belt transect was 100 m x 20 m each, separated by 100 m. For hormonal stress reactivity, we measured 81 male lizards from WT areas, and 63 male lizards from NWT areas. Two blood samples were taken from each animal (baseline and stress-induced). Antipredator behaviours were measured by approaching 106 lizards in WT areas and 73 lizards in NWT areas and recording escape responses. Gross morphology was measured on 89 male lizards from WT and 64 male lizards from NWT sites. Dewlap colour measurements were taken from 89 males from WT areas and 60 males from NWT areas.

Research sample

Habitat and substrate measures of the study area were taken from remote sensing and on-ground measurements to demonstrate no significant differences between the structure of windturbine and non windturbine areas. Behavioral assays of predation risk was measured by (1) counting the number of avian predators seen, and (2) counting the number of times a raptor (typically Buteo sp., Butastur sp., or Elanus sp.) was seen dive bombing the ground. The rest of the samples were measures of behaviour, morphology and physiology of the superb fan-throated lizard, *Sarada superba* that live in areas with and without windturbines.

Sampling strategy

For the landscape-level measurement of landcover, we measured the entire study area. Sample size for substrates on the ground were decided based on overall low variability seen on the plateau. Sampling plots were evenly dispersed across each study area (see Supplementary figure 1). Sample sizes for lizards varied based on the measurements. For blood sampling, only lizards caught within 3 min of sighting were included to ensure a baseline measure of corticosterone. Capture of lizards also had to be spread out in space to ensure that capture of one individual did not elevate the stress hormones of neighbouring lizards. A similar spacing protocol was used for the measure of antipredator behaviour so that the "attack" of one individual would not affect the response of nearby individuals. Sample sizes for morphology and dewlap colour were based on the number of lizards that we were permitted to catch based on our research permit and ethics clearance. Lizards used for morphological measurements were also a different subset from the lizards that were sampled for the antipredator and hormone measures to ensure than prior disturbance by us would not adversely influence the morphology and colour.

Data collection

All data were collected in the field by AZ and HB during the peak activity period of the lizard species. Data was collected continuously and the different measures were taken throughout the sampling season.

Timing and spatial scale

Everyday from March to June on 2013 and 2014

Data exclusions

No collected data were excluded from the analysis.

Reproducibility

These data were generated from field measures and thus could not be examined for experimental reproducibility. Analysis of data from replicate sites within treatments (windturbine vs no-windturbine) show low variance and thus support the fact that within treatment variation is lower than between treatment variation. We include cohen's d for all the statistical analyses.

Randomization

Visit to sampling sites were randomized across days and sampling type (behaviour, morphology, physiology). Care was taken to spread sampling out across space to ensure as much coverage of the environment as possible.

Blinding

Field data on wild caught animals (density, behaviour, morphology) could not be collected blind. Analyses of blood samples and dewlap colour from digital images were conducted blind, with relabeled codes.

Did the study involve field work?

☒ Yes

☐ No

Field work, collection and transport

Field conditions

Rocky lateritic plateau with little vegetation cover. Average temperature during the study season = 34degC (range = 21degC - 45degC). Average precipitation during the study season = 122mm (range =6mm - 152mm). Annual temperature = 26degC and annual precipitation = 91mm

Location

Chalkewadi plateau in the Western Ghats, Mahahastra, India. 17deg36'40"N; 73deg47'27"E

Access and import/export	We have Animal ethics permits from the Indian Institute of Science Animal Ethics Committee and collection/research permits from the state forest department. No import/export permits were required.
Disturbance	Disturbance of the environment was minimal, as most measurements were observational data. And all animals caught were returned to site of capture.

Reporting for specific materials, systems and methods

Materials & experimental systems

n/a	Involved in the study
☒	☐ Unique biological materials
☒	☐ Antibodies
☒	☐ Eukaryotic cell lines
☒	☐ Palaeontology
☐	☒ Animals and other organisms
☒	☐ Human research participants

Methods

n/a	Involved in the study
☒	☐ ChIP-seq
☒	☐ Flow cytometry
☒	☐ MRI-based neuroimaging

Animals and other organisms

Policy information about [studies involving animals](#); [ARRIVE guidelines](#) recommended for reporting animal research

Laboratory animals	none
Wild animals	Several raptor species: only observational data. Superb fan-throated lizard, <i>Sarada superba</i> . For density estimation and antipredator behaviours, adults were not captured. For morphology, males were captured by hand, measured immediately, and released at site of capture within 30 min. For physiology, males were captured by hand, and were placed in individual cotton bags for up to 30 min before a second blood sample was taken (stress-induced corticosterone measure). While in cloth bags, lizards were kept in the shade. All lizards captured for physiological measurements were released at their exact location of capture within 45 min.
Field-collected samples	Blood samples were stored in microcentrifuge vials in ETOH and kept cool until analysis in the lab.