

Stability analysis: exploring the range of relative social cost values.

Here we present the dynamic community results for different relative switching, absence, and visiting cost settings. Figs A–C show results for cost settings of switching = 1, absence = 1, visiting = 3. Figs D–F show results for cost settings of switching = 1, absence = 3, visiting = 1. Finally, Figs G–I show results for cost settings of switching = 1, absence = 1, visiting = 1.

Cost settings: switching = 1, absence = 1, visiting = 3

(a) Grevy's zebra (b) Onagers

Figure A. Inferred dynamic communities of Grevy's zebra and onagers with costs set to switching = 1, absence = 1, visiting = 3.

(a) Grevy's zebra, majority dynamic communities (b) Onagers, majority dynamic communities

Figure B. Majority superimposed dynamic communities with costs set to switching = 1, absence = 1, visiting = 3. Superimposed dynamic communities, where each node is colored by the majority color of its dynamic communities ((a) Grevy's and (b) onagers).

Figure C. Projection onto the first two principle components of the dynamic communities metrics of all the individuals in both Grevy's zebra and onagers, with costs set to switching = 1, absence = 1, visiting = 3.

Cost settings: switching = 1, absence = 3, visiting = 1

(a) Grevy's zebra (b) Onagers

Figure D. Inferred dynamic communities of Grevy's zebra and onagers with costs set to switching = 1, absence = 3, visiting = 1.

(a) Grevy's zebra, majority dynamic communities (b) Onagers, majority dynamic communities

Figure E. Majority superimposed dynamic communities with costs set to switching = 1, absence = 3, visiting = 1. Superimposed dynamic communities, where each node is colored by the majority color of its dynamic communities ((a) Grevy's and (b) onagers).

Figure F. Projection onto the first two principle components of the dynamic communities metrics of all the individuals in both Grevy's zebra and onagers, with costs set to switching = 1, absence = 3, visiting = 1.

Cost settings: switching = 3, absence = 1, visiting = 1

(a) Grevy's zebra

(b) Onagers

Figure G. Inferred dynamic communities of Grevy's zebra and onagers with costs set to switching = 3, absence = 1, visiting = 1.

(a) Grevy's zebra,
majority dynamic
communities

(b) Onagers, major-
ity dynamic commu-
nities

Figure H. Majority superimposed dynamic communities with costs set to switching = 3, absence = 1, visiting = 1. Superimposed dynamic communities, where each node is colored by the majority color of its dynamic communities ((a) Grevy's and (b) onagers).

Figure I. Projection onto the first two principle components of the dynamic communities metrics of all the individuals in both Grevy's zebra and onagers, with costs set to switching = 3, absence = 1, visiting = 1.