**Description of tree-stops data used for the tree-encounter anlysis (information transfer around trees)**

Source: all\_tree\_visits\_main.csv

TAG: The unique ID assigned to each bat.

Night: The night number, starting from the first night = 1.

TAG\_Night: A combined identifier of TAG and Night.

date\_global: The date of the beginning of the foraging night (doesn’t change after midnight, format: YYYY-MM-DD).

start: The start time of the bat's stops on a specific tree (Unix timestamp).

end: The end time of the bat's stops on a specific tree (Unix timestamp).

time\_start: The start time of the bat's stops on a specific tree (datetime format).

time\_end: The end time of the bat's stops on a specific tree (datetime format).

duration: The duration of visit to a tree (in seconds).

month: The month when the observation was made.

fruit\_season: Indicates the main fruit season (based on species relative abundance in each period).

dummy: Identifies caves vs. trees

cluster\_Tree: The identifier for the tree cluster visited by the bat.

patch: A patch is a cluster of adjacent trees

patch\_ID: Unique identifier for the patch.

patch\_start: Start time of visiting a specific patch (Unix timestamp).

patch\_end: End time of visiting a specific patch (Unix timestamp).

patch\_time\_start: Start time of visiting a specific patch (datetime format).

patch\_time\_end: End time of visiting a specific patch (datetime format).

patch\_duration: Duration in a patch (in seconds).

patch\_X: X-coordinate of the patch.

patch\_Y: Y-coordinate of the patch.

tree\_sp: Species of the tree the bat visited.

cave\_origin: which roost the bat came from during each night.

medX: Median X-coordinate of the bat's tree visit (per stop).

medY: Median Y-coordinate of the bat's tree visit (per stop).

X\_tree: X-coordinate of the tree (multiple stops may be attributed to the same tree).

Y\_tree: Y-coordinate of the tree (multiple stops may be attributed to the same tree).

stops\_ID: Unique identifier for stops.

DateTimeStart: Start date of the tree stop (datetime format).

DateTimeEnd: End date of the tree stop (datetime format).

new\_p: Identifier to flag if a bat visited a new patch or not.