

## **Metadata for file: Annotations.csv**

### **Authors**

Yosef Prat<sup>1</sup>, Mor Taub<sup>1</sup>, Ester Pratt<sup>1</sup>, Yossi Yovel<sup>1</sup>

### **Affiliations**

1. Department of Zoology, Faculty of Life sciences, Tel Aviv University, Tel Aviv, Israel

\* Corresponding authors: Yossi Yovel ([yossiyovel@gmail.com](mailto:yossiyovel@gmail.com)), Yosef Prat ([yosefprat@gmail.com](mailto:yosefprat@gmail.com))

Treatment (ID)	Treatment (Type)	From Date (yyyy-mm-dd)	To Date (yyyy-mm-dd)	Social Composition (Bat IDs)	Rec. Channel
1	Colony <sup>a</sup>	2012-06-01	2012-09-06	101,107,108,112,113,114,115,118	4,11
2	Colony <sup>a</sup>	2012-06-01	2012-09-05	102,109,110,111,116,119,120	9,12
3	Isolation	2012-07-24	2012-08-26	103,104	2
4	Isolation	2012-07-28	2012-08-26	105,106	3
5	Colony <sup>b*</sup>	2012-08-26	2012-12-12	108,115	7
6	Colony <sup>b*</sup>	2012-08-26	2012-09-20	111,120	10
7	Colony <sup>b*</sup>	2012-08-26	2012-09-20	103,105	5
8	Colony <sup>b</sup>	2012-12-14	2013-01-02	103,105,108,115	7
9	Colony <sup>a</sup>	2012-10-01	2012-12-15	111,120,213,214,216,221,226,228,233	3,4
10	Colony <sup>a</sup>	2012-10-01	2012-12-15	201,202,203,204,205,208,211,218,222,223,225,231	1,2
11	Isolation	2012-10-01	2012-12-17	207,209	11
12	Isolation	2012-11-01	2012-12-17	210,212	9
13	Isolation	2012-10-01	2012-10-31	215,217	9/10 <sup>†</sup>
14	Isolation	2012-10-01	2012-12-17	220,224	6
15	Isolation	2012-10-01	2012-12-17	230,232	12
16	Colony <sup>b</sup>	2012-12-18	2013-05-12	208,211,216,221,231	5,9/8 <sup>††</sup>
17	Colony <sup>b</sup>	2012-12-18	2013-05-12	207,210,215,220,230	1,2
18	Colony <sup>b</sup>	2013-05-13	2013-06-21	207,210,216,221,230	5,8
19	Colony <sup>b</sup>	2013-05-13	2013-06-21	208,211,215,220,231	1,2
20	Colony <sup>b</sup>	2014-02-06	2014-02-19	207,208,211,215,216,221	1,2

**Table 1. Recording settings.** Colony treatment involves a group of bats housed in a *Colony* chamber (Fig. 1a). Isolation treatment involves a mother and her pup housed in an *Isolation* chamber (Fig. 1a). When a bat ID appears in more than one treatment it was moved from one treatment to the next, always in the order of their start time, and usually at the beginning of the next treatment (exact times of recordings are included in Data Citation 1).

<sup>a</sup> The colony includes adults which were captured in the wild (and pups born in the experimental setup). <sup>b</sup> The colony includes only pups which were born in the experimental setup (though they can already be adults in late recordings; refer to dates of birth in Table 2 for details). \* When only two bats were housed in a colony chamber, only one of two compartments (the “roost”) was used (see Fig. 1a). <sup>†</sup> Recording channel switched from 9 to 10 on Nov. 1<sup>st</sup> 2012. <sup>††</sup> Recording channel switched from 9 to 8 on Jan. 22<sup>nd</sup> 2013.

Bat ID	Mother ID	Date of birth	Sex	Treatments	#Rec. Emitted	#Rec. Involved
101	NA	Adult	M	1	197	903
102	NA	Adult	F	2	307	525
103	104	2012-06-28	M	3;7	62	152
104	NA	Adult	F	3	0	50
105	106	2012-05-19	F	4;7	73	112
106	NA	Adult	F	4	0	30
107	NA	Adult	F	1	156	274
108	107	2012-06-05	NA	1;5	190	247
109	NA	Adult	F	2	1329	2103
110	NA	Adult	F	2	1058	1791
111	110	2012-05-09	F	2;6;9	1341	2393
112	NA	Adult	F	1	271	582
113	112	2012-06-10	NA	1	97	103
114	NA	Adult	F	1	180	478
115	114	2012-05-20	F	1;5	230	359
116	NA	Adult	M	2	159	327
118	NA	Adult	F	1	62	190
119	NA	Adult	F	2	786	1249
120	119	2012-06-05	NA	2;6;9	659	1443
201	NA	Adult	F	10	634	2402
202	202	2012-09-25	NA	10	148	330
203	NA	Adult	F	10	579	2847
204	NA	Adult	F	10	1086	2949
205	NA	Adult	F	10	426	1779
207	209	2012-10-02	M	11;17;18;20	1245	15277
208	204	2012-09-22	M	10;16;19;20	779	13947
209	NA	Adult	F	11	0	92
210	212	2012-09-30	NA	12;17;18	1493	5132
211	205	2012-09-22	F	10;16;19;20	2225	8264
212	NA	Adult	F	12	0	3
213	NA	Adult	F	9	1239	2734
214	213	2012-09-12	NA	9	91	272
215	217	2012-10-04	F	13;17;19;20	6150	15945
216	226	2012-09-12	F	9;16;18;20	2524	7843
217	NA	Adult	F	13	0	113
218	NA	Adult	M	10	67	4029
220	224	2012-10-14	NA	14;17;19	1426	9270
221	228	2012-09-26	M	9;16;18;20	765	11119
222	225	2012-09-25	NA	10	102	245
223	NA	Adult	F	10	92	213
224	NA	Adult	F	14	0	72
225	NA	Adult	F	10	468	1614
226	NA	Adult	F	9	2310	4062
228	NA	Adult	F	9	1653	4238
230	232	2012-10-14	NA	15;17;18	3269	7946
231	203	2012-09-22	M	10;16;19	3051	11206
232	NA	Adult	F	15	0	41
233	NA	Adult	M	9	168	7737

0	Unknown	7858	21073
Minus-sign ("-")	Unknown whether the individual is the emitter or the addressee	44075	44710

**Table 2. Description of recorded subjects.** *Bat ID* is used in the *emitter* and *addressee* columns in the annotations file. For pups which were born in the experimental setup the *Mother ID* and *Date of birth* are given; the others were captured in the wild as adults. *Treatments* as specified in Table 1. *#Rec. Emitted* is the number of recorded files containing vocalizations emitted by each bat (a recorded file may contain several vocalizations). *#Rec. Involved* is the number of recorded files containing vocalization emitted by or directed at the bat. *NA* – Not Available. *Minus-signed* emitter and/or addressee (e.g. -201) designate a common situation when the pair of the interacting bats was recognized but their role is in doubt (i.e. the call could be emitted by either bat).

Column		Description
1	File ID	File Identifier with properties detailed in FileInfo.csv (Data Citation 1).
2	Emitter	Bat ID of the emitter of the vocalizations. Negative value: the specified ID is of either the emitter or the addressee.
3	Addressee	Bat ID of the addressee of the vocalizations. Negative value: the specified ID is of either the emitter or the addressee.
4	Context	The context of the vocalizations as specified in Table 4.
5	Emitter pre-vocalization action	The action performed by the emitter of the vocalization before the start of the vocal interaction.
6	Addressee pre-vocalization action	The action performed by the addressee of the vocalization before the start of the vocal interaction.
7	Emitter post-vocalization action	The action performed by the emitter of the vocalization after the end of the vocal interaction.
8	Addressee post-vocalization action	The action performed by the addressee of the vocalization after the end of the vocal interaction.
9	Start sample	The annotation refers to the section beginning at this sample in the file (File ID, WAV format)
10	End sample	The annotation refers to the section which ends at this sample in the file.

**Table 3. Annotation details.** Descriptions of each column of the annotation file.

	ID	Context / Behaviour	Description	# Rec.
Context	0	Unknown	Unknown context	640
	1	Separation	Emitted (rarely) by adults when separated from the group.	504
	2	Biting	Emitted by a bat after being bitten by another.	1788
	3	Feeding	The interaction involves food.	6683
	4	Fighting	The interaction involves intense aggressive physical contact.	7963
	5	Grooming	The interaction involves one bat grooming another.	383
	6	Isolation	Emitted by young pups.	5714
	7	Kissing	The interaction involves one bat licking another's mouth.	362
	8	Landing	The interaction involves one bat landing on top of another.	16
	9	Mating protest	Emitted by a female protesting a mating attempt.	2338
	10	Threat-like	The interaction involves contactless aggressive displays.	1065
	11	General	Unspecified context. The interacting bats are usually 10-20cm apart (in other interactions the bats are usually closer).	29627
	12	Sleeping	The interaction occurs in the sleep cluster.	33997
Pre-vocalization action	0	Unknown	Unknown action	13553*
	1	Fly in	The bat approached the interaction location flying.	3909*
	2	Present	The bat was present in the interaction location before the interaction started.	158164*
	3	Crawl in	The bat approached the interaction location crawling.	6534*
Post-vocalization action	0	Unknown	Unknown action	13437*
	1	Cower	The bat cowered, partially covering its head with the wings.	77*
	2	Fly away	The bat left the interaction location flying.	6745*
	3	Stay	The bat stayed at the interaction location after the interaction ended.	155485*
	4	Crawl away	The bat left the interaction location crawling.	6416*

**Table 4. Annotated contexts and behaviours.** Descriptions of the contexts and behaviours appearing in the annotation file, and the number of recordings obtained for each category.

\* Counted for both the emitter and addressee in each interaction.