

Curriculum vitae M. Taborsky

Name: **Michael Taborsky**
Nationality: Austrian
Date of birth: 8 February 1955
Position: **Codirector**, Institute of Ecology and Evolution (2000-2020)
Chair, Div. Behavioural Ecology; University of Bern (2000-2020)
URL website: <http://behav.zoology.unibe.ch/index.php?p=109>



Career history

2000 - 2020 **Full Professor and Chair** of Behavioural Ecology, Co-director Inst. Ecol. Evol. University of Bern
2000 - **Associate Professor**, University of Vienna
1993 - 2000 **Deputy director** of KLIVV (Austrian Academy of Sciences); since 1995 Oberrat
1992 **Habilitation**, University of Vienna
1986 - 2000 **Research scientist** at KLIVV (Austrian Academy of Sciences), Vienna
1984-1985 **Max-Planck postdoctoral fellow** at MPI Behavioural Physiology, Seewiesen
1982-1983 **DFG postdoctoral fellow** at MPI Behavioural Physiology, Seewiesen and STARESO, Corsica
1982 **Graduation (PhD)** at University of Vienna, Major Zoology

Academic duties, editorial positions, honours and awards (reverse chronology)

- **Editor** of *Behavioural Ecology* (2017 - 2020)
- **Acting Director** Institute of Ecology and Evolution, University of Bern (2006 – 2008; 2016 - 2018)
- **Review Editor** for *Frontiers in Ecology and Evolution* (2016 -)
- **Acting Director** Department of Biology, University of Berne (2013-2015)
- **Vice-Dean** Science Faculty, University of Bern (2005 - 2007)
- **President** Ethologische Gesellschaft e.V. (2003 - 2006)
- **Secretary General** International Council of Ethologists (ICE; 2003 - 2006)
- **Editor-in-chief** of *Ethology* (2000 - 2010)
- **Vice-president** Ethologische Gesellschaft e.V. (1999 – 2002)
- **Secretary General Elect** of ICE (1999 - 2003)
- **Editor** of *Ethology* (1998 – 1999)
- **Chairman** XXV International Ethological Conference (Vienna 1997)
- **Chairman** Ethologische Gesellschaft e.V. (1993 – 1997)
- **Theodor-Körner-Prize**, Vienna, Austria (1997)

Scientific publications

221 peer reviewed publications listed in the ISI Web of Science and by Google Scholar, cited **13'543** times (average **61/paper**), **h-index = 63** (source: Google Scholar, as of 6 October 2020).

For full list of publications and available downloads see <http://behav.zoology.unibe.ch/index.php?p=83>

I have published in a diverse array of disciplines and types of journals, including journals specialized in:

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| <u>General science</u> | (13 papers: Nature; Nature Comm; Science Advances; PNAS; PLoSOne; Roy Soc Open Sci; Sci Rep) |
| <u>General biology</u> | (27 papers: Current Biology; PLoS Biology; Proc Roy Soc B; Phil Trans Roy Soc B; Biol Lett; Biol Rev) |
| <u>Ecology and evolution</u> | (29 papers: Nature Ecol Evol; Ecol Lett; Evolution; J Evol Biol; Trends Ecol Evol; BMC Evol Biol; Funct Ecol; Ecol Evol) |
| <u>Animal behaviour</u> | (94 papers: Anim Behav; Behav Ecol; Behav Ecol Sociobiol; Ethology; Behaviour; Adv Study Behav; Curr Opin Behav Sci; Behav Process; Appl Anim Behav Sci) |
| <u>Animal physiology</u> | (7 papers: Horm Behav; Trends Neurosci; J Comp Physiol B; J Exp Zool A; Physiol Behav; J Exp Biol) |
| <u>Genetics/microbiology</u> | (3 papers: Mol Phylogenet Evol; J Heredity; FEMS Microbiol Ecol) |
| <u>Psychology</u> | (3 papers: J Comp Psychol; Learn Behav) |
| <u>Theoretical biology</u> | (2 papers: J Theor Biol) |
| <u>Marine biology</u> | (2 papers: Marine Biol, Marine Ecol PSZNI) |
| <u>Taxon oriented journals</u> | (several ; including entomology, arachnology, fish biology, ornithology) |

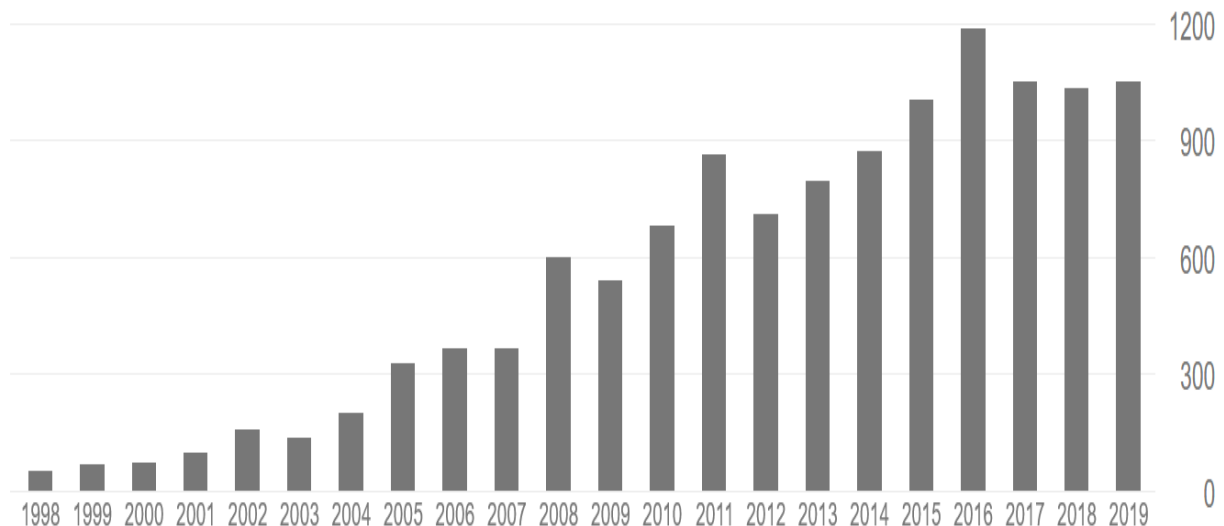
I have contributed **21 invited chapters** to edited books published, among others, by Cambridge University Press (8 chapters in 5 books), Oxford University Press, Elsevier, Springer

I edited/co-edited **1** book ("**Alternative Reproductive Tactics: An Integrative Approach**" Cambridge Univ. Press 2008) and **4** special journal issues (Phil Trans Roy Soc B, Advances in Ethology, J Ornithol, Funct Ecol)

I have written a book for Cambridge University Press on "**The Evolution of Social Behaviour**" (authors: Taborsky, M, Cant, M & Komdeur, J; to appear in autumn 2020)

Scientific impact

Citations per year (source: Google Scholar, 6 Oct 2020)



Last five years track-record:

Over the last 5 years I have published **60** peer reviewed papers listed by ISI Web of Science and Google Scholar, including papers published in major interdisciplinary journals (Science Advances, PNAS, Current Biology, Philosophical Transactions of the Royal Society) and in the leading journals of my research field (e.g., Proceedings of the Royal Society B, Evolution, Functional Ecology, Nature Ecology & Evolution, Behavioral Ecology, Animal Behaviour, Trends in Neurosciences, Biology Letters).

Impact: Total number citations (Google Scholar, 9 June 2020) **13'543**; h-index = **63**

Supervision of Graduate students and Post-Docs

- Supervisor of **41** doctoral dissertations (PhD)
- Supervisor of **19** Post-Doctoral Researchers at the Universities of Vienna and Bern, from Canada (4), Czech Republic, Finland, Germany (2), Netherlands (2), UK, Sweden, and Switzerland
- Supervisor of **70** master theses (and Diplomarbeiten; only successfully completed theses are listed) at Ludwig-Maximilians-University Munich, University of Vienna, University of Bielefeld, University of Bern and Rijksuniversiteit Groningen
- External examiner of **12** PhD-candidates at the Universities of Auckland, Bielefeld, Dijon, Exeter, Grahamstown, Groningen, Leiden, Stockholm and Vienna
- Co-supervisor of international PhD and Master students from Austria, Netherlands, Columbia, Portugal, Canada and South Korea
- Ongoing supervision: 2 Post-Docs, 4 PhD students and 2 Master students

During the last 10 years I have been invited to act as external expert in doctoral programs at universities in Santiago (Chile), Mexico City (Mexico), Turku (Finland) and Kiel (Germany), and I have acted as external examiner at PhD-defences at the Universities of Dijon, Exeter, Groningen, Okinawa, and Stockholm.

Several of my MSc and PhD-students won prizes with their thesis (7x Faculty Prize Univ. Bern, 4x Volz Prize, 2x Dr. Lutz Zwillenberg Prize, 1x Horst-Wiehe-Prize). Among the PhD-students and post-docs I have supervised, presently one is head of a clinical research centre, 8 are university professors, 6 university lecturers, 4 junior research group leaders, 9 post-docs, 1 environmental program coordinator, 3 research administrators and governmental coordinators, 1 public health coordinator; they are employed in 18 academic institutions in 9 countries (incl. Universities of Cambridge (UK), Exeter (UK), Bristol (UK), Manchester Metropolitan (UK), Edinburgh (UK), Ohio State (USA), McMaster/Hamilton (Canada), Memorial-Newfoundland (Canada), Vienna (Austria), Linz (Austria), Helsinki (Finland), Zürich (Switzerland), Bern (Switzerland), Neuchatel (Switzerland), Groningen (Netherlands), Nagano (Japan) , Linnaeus University (Sweden).

Organisation of Scientific meetings and Symposia

Chaired, organized and co-organized **19** international conferences and symposia, ranging in size from 25 to 1000 participants. Chaired and co-chaired three International Ethological Conferences (IEC) as Organizer in Vienna (Austria; 1997) and as Secretary General of the International Council of Ethologists in Halifax (Canada; 2007) and Rennes (France; 2009). Organization of **9** international symposia in Adelboden and Arolla (Switzerland). Between March 2011 and October 2012 I was invited as European representative to participate in the NESCent initiative "Integrative models of vertebrate sociality: evolution, mechanism and emergent properties" at The National Evolutionary Synthesis Center at Durham (Duke University, USA).

Presentations at meetings/invited seminars

22 invited talks and plenaries at international conferences, 74 contributed spoken papers at international meetings, 119 supervised/co-authored student poster papers at international meetings (6 have won Best Poster-Awards), 87 invited talks at universities/research institutions.

Current institutional duties

Teaching: Regular courses in ecology, evolution and behaviour at undergraduate and graduate levels at the Universities of Bern and Vienna (2000-2020).

Administrative: Codirector of Inst. Ecol. Evol. and Chair of Behavioural Ecology Division, University of Bern (2000-2020).

Reviewing

Grant proposals reviewed for 13 international funding organizations. Manuscripts reviewed for 48 science journals. Book proposals reviewed for 5 science publishers. ERC panel member for EU-Consolidator Grants.

Collaborations

Collaborations have included researchers from academic institutions in (in alphabetical order): Austria (Graz, Vienna), Canada (Laval, McMaster/Hamilton), Germany (Seewiesen, Konstanz Leipzig, Regensburg), Japan (Kyoto, Nagano, Osaka), Netherlands (Groningen), New Zealand (Auckland), Portugal (Lisbon, Porto), Sweden (Kalmar, Uppsala), Switzerland (Basel, Neuchatel), United Kingdom (Bristol, Cambridge, Exeter, Glasgow), USA (Austin, Ohio State, Santa Barbara), Zambia (Lusaka).

Research expeditions:

7 expeditions led to Tanzania and Zambia (Lake Tanganyika) in the last 10 years.

Professional and public recognition

In 2011, the "*Laborjournal*" classified the most cited behavioural biologists in the years 2004-2007, which listed me in the 4th place (http://www.laborjournal.de/rubric/ranking/R11_01/start.lasso).

In the last 10 years, public media have reported about my work on >>100 occasions. This includes >50 newspaper reports (including NZZ, Frankfurter Allgemeine Zeitung, der Standard, Profil, Süddeutsche Zeitung, The Economist, New York Times), 21 press agency releases (SDA, APA, Univ. Bern, Edinburgh, Würzburg), 26 science media webpages, 14 radio and TV programs (in Germany and Switzerland), and 7 reports on my work in scientific journals (including Nature News, Science News, National Geographic, Animal Behaviour Focus).

Publications Michael Taborsky 2015 - Sep 2020

- 223 Josi, D., Heg, D., Takeyama, T., Bonfils, D., Konovalov, D.A., Frommen, J.G., Kohda, M., Taborsky, M. (2020). Relatedness, social structure and helping behaviour in the cooperatively breeding cichlid *Neolamprologus savoryi*. **Am. Nat.** (in revision)
- 222 Jungwirth, A., Zöttl, M., Bonfils, D., Josi, D., Frommen, J.G., Taborsky, M. (2020). Philopatry universally yields higher fitness in a cooperative breeder with sex-biased dispersal. **Science Advances** (in revision).
- 221 Taborsky, M., Cant, M.A., Komdeur, J. (2020). The Evolution of Social Behaviour. **Cambridge University Press** (in press).
- 220 Josi, D., Freudiger, A., Taborsky, M., Frommen, J.G. (2020). Experimental predator intrusions in a cooperative breeder reveal threat-dependent task partitioning. **Behavioral Ecology** (in press)
- 219 Jordan, L.A., Taborsky, B., Taborsky, M. (2020). Cichlids as a model system for studying social behaviour and evolution. In: "The Behavior, Ecology and Evolution of Cichlid Fishes: A Contemporary Modern Synthesis". **Springer Academic** (in press).
- 218 Naef, J., Taborsky, M. (2020). Punishment controls helper defence against egg predators but not against fish predators in cooperatively breeding cichlids. **Anim. Behav.** 168: 137-147.
- 217 Schneeberger, K., Röder, G., Taborsky, M. (2020). The smell of hunger: Norway rats provision social partners based on odour cues of need. **PLoS Biology**, 18(3), e3000628.
- 216 Durrer, L., Taborsky, M., Frommen, J. G. (2020). Group-sized preferences in a shoaling cichlid. **Behaviour** 157:415-431.
- 215 Naef, J., Taborsky, M. (2020). Commodity-specific punishment for experimentally induced defection in cooperatively breeding fish. **R. Soc. Open Sci.** 7: 191808.
- 214 Josi, D., Taborsky, M., Frommen, J.G. (2020). Investment of group members is contingent on helper number and the presence of young in a cooperative breeder. **Anim. Behav.** 160: 35-42.
- 213 Schneeberger, K., Taborsky, M. (2020). The role of sensory ecology and cognition in social decisions: Costs of acquiring information matter. **Func. Ecol.** 34: 302-309.
- 212 Engelhardt, S.C., Taborsky, M. (2020). Broad definitions of enforcement are unhelpful for understanding evolutionary mechanisms of cooperation. **Nat. Ecol. Evol.** 4(3), 322-322.
- 211 Taborsky, M., Riebli, T. (2020). Coaction vs. Reciprocal Cooperation among Unrelated Individuals in Social Cichlids. **Front. Ecol. Evol.** 7: 515.
- 210 Schweinfurth, M.K., Taborsky, M. (2020). Rats play tit-for-tat instead of integrating social experience over multiple interactions. **Proc. R. Soc. B** 287: 20192423.
- 209 Nuotclà, J. A., Biedermann P. H. W., Taborsky, M. (2019) Pathogen defence is a potential driver of social evolution in ambrosia beetles. **Proc. R. Soc. B** 286: 20192332.
- 208 Range F., Kassis A., Taborsky M., Boada M. & Marshall-Pescini S. (2019) Wolves and dogs recruit human partners in the cooperative string-pulling task. **Sci. Rep.** 9: 17591
- 207 Taborsky M., Koblmüller S., Sefc K.M., McGee M., Kohda M., Awata S., Hori M. & Frommen J.G. (2019) Insufficient data render comparative analyses of the evolution of cooperative breeding mere speculation: A reply to Dey et al. **Ethology** 125: 851-854.
- 206 Schweinfurth, M.K., Aeschbacher, J., Santi, M. & Taborsky, M. (2019). Male Norway rats cooperate according to direct but not generalized reciprocity rules. **Anim. Behav.** 152: 93-101.
- 205 Jungwirth A., Balzarini V., Zöttl M., Salzmann A., Taborsky M. & Frommen J.G. (2019) Long-term individual marking of small freshwater fish: the utility of Visual Implant Elastomer tags. **Behav. Ecol. Sociobiol.** 73:49.
- 204 Taborsky, M. (2019) From Ethology to Behavioral Biology. **Encyclopedia of Animal Behavior**. 2nd ed. Vol. 1. 99-102.

- 203 Gfrerer, N., Taborsky, M. & Würbel, H. (2019) No evidence for detrimental effect of chemical castration on working ability in Swiss military dogs. **Appl. Anim. Behav. Sci.**, 211: 84-87.
- 202 Josi D., Taborsky M. & Frommen J.G. (2019) First field evidence for alloparental egg care in cooperatively breeding fish. **Ethology** 125: 164-169.
- 201 Josi D., Taborsky M. & Frommen J.G. (2018) Habitat preferences depend on substrate quality in a cooperative breeder. **Evol. Ecol. Res.** 19: 517-527.
- 200 Engelhardt, S.C., Kingma, S.A., Taborsky, M. (2018) No evidence for a heritable altruism polymorphism in Tibetan ground tits. **Proc. Nat. Acad. Sci. USA** 115: E11208-E11209.
- 199 Tanaka H., Frommen J.G., Koblmüller S., Sefc K.M., McGee M., Kohda M., Awata S., Hori M. & Taborsky M. (2018) Evolutionary transitions to cooperative societies in fishes revisited. **Ethology** 124: 777–789.
- 198 Taborsky, M., Schütz, D., Goffinet, O., van Doorn, GS (2018) Alternative male morphs solve sperm performance / longevity trade-off in alternate directions. **Science Advances**, 4 (5), eaap8563.
- 197 Schweinfurth MK, Taborsky M. (2018) Norway rats (*Rattus norvegicus*) communicate need which elicits donation of food. **J. Comp. Psychol.** 132, 119-129.
- 196 Gfrerer, N. and Taborsky, M. (2018) Working dogs transfer different tasks in reciprocal cooperation. **Biology Letters** 14 (2), 20170460.
- 195 Schweinfurth MK & Taborsky M. (2018) Relatedness decreases and reciprocity increases cooperation in Norway rats. **Proc. R. Soc. B** 285: 20180035.
- 194 Schweinfurth, M. K., & Taborsky, M. (2018). Reciprocal Trading of Different Commodities in Norway Rats. **Current Biology**, 28, 594–599.
- 193 Stieger, B., Schweinfurth, M.K. & Taborsky, M. (2017): Reciprocal allogrooming among unrelated Norway rats (*Rattus norvegicus*) is affected by previously received cooperative, affiliative and aggressive behaviours. **Behav. Ecol. Sociobiol.** 71(12), 182.
- 192 Gfrerer, N., Taborsky, M. and Würbel, H. (2017) Benefits of intraspecific social exposure in adult Swiss military dogs. **Appl. Anim. Behav. Sci.** 201, 54-60.
- 191 Schweinfurth, MK, Taborsky, M. (2017): The transfer of alternative tasks in reciprocal cooperation. **Anim. Behav.** 131: 35-41.
- 190 Schmid, R., Schneeberger, K., Taborsky, M. (2017): Feel good, do good? Disentangling reciprocity from unconditional prosociality. **Ethology** 123(9), 640-647.
- 189 Schweinfurth, MK, Stieger, B. Taborsky, M. (2017): Experimental evidence for reciprocity in allogrooming among wild-type Norway rats. **Scientific Reports** 7: 4010.
- 188 Schweinfurth, MK, Neuenschwander, J., Engqvist, L., Schneeberger, K., Rentsch, AK, Gyax, M., Taborsky, M. (2017): Do female Norway rats form social bonds? , **Behav. Ecol. Sociobiol.** 71:98.
- 187 Dolivo, V., Taborsky, M. (2017): Environmental enrichment of young adult rats (*Rattus norvegicus*) in different sensory modalities has long-lasting effects on their ability to learn via specific sensory channels. **J. Comp. Psychol.** 131(2), 79.
- 186 Engqvist, L., Taborsky, M. (2017): The evolution of strategic male mating effort in an information transfer framework. **J. Evol. Biol.** 30(6), 1143-1152.
- 185 Gfrerer, N., Taborsky, M. (2017): Working dogs cooperate among one another by generalized reciprocity. **Scientific Reports** 7: 43867.
- 184 Schütz, D., Tschirren, L., Pachler, G., Grubbauer, P., Taborsky, M. (2017): Sperm-limited males save ejaculates for future matings when competing with superior rivals. **Anim. Behav.** 125: 3-12.

- 183 Balzarini V., Taborsky M., Villa F. & Frommen JG (2017): Computer animations of color markings reveal the function of visual threat signals in *Neolamprologus pulcher*. **Curr. Zool.** 63 (1), 45-54.
- 182 Bayani, D.-M., Taborsky, M., Frommen, JG (2017) To pee or not to pee: urine signals mediate aggressive interactions in the cooperative breeding cichlid *Neolamprologus pulcher*. **Behav. Ecol. Sociobiol.** 71:37.
- 181 Taborsky, M. (2016) Cooperative breeding. In: VA Weekes-Shackelford, TK Shackelford (eds) **Encyclopaedia of Evolutionary Psychological Science**, Springer
- 180 Kuerthy, C., Ros, AF, Taborsky, M. (2016). Androgen responses to reproductive competition of fixed or plastic alternative reproductive tactics. **Journal of Experimental Biology** 219, 3544-3553.
- 179 Schweinfurth, M. and Taborsky, M. (2016) No evidence for audience effects in reciprocal cooperation of Norway rats. **Ethology** 122: 513-521.
- 178 Dolivo, V., Rutte, C., Taborsky, M. (2016) Ultimate and proximate mechanisms of reciprocal altruism in rats. **Learn. Behav.** 44(3), 223-226.
- 177 Groenewoud, F., Frommen, JG, Josi, D., Tanaka, H., Jungwirth, A., Taborsky, M. (2016) Predation risk drives social complexity in cooperative breeders **Proc. Natl. Acad. Sci. USA** 113(15), 4104-4109.
- 176 Engqvist, L. and Taborsky, M. (2016) The evolution of genetic and conditional alternative reproductive tactics. **Proc. R. Soc. B** 283: 20152945.
- 175 von Kuerthy, C., Taborsky, M. (2016) Contest versus scramble competition among males pursuing fixed or plastic alternative reproductive tactics. **Animal Behaviour** 113: 203-212.
- 174 Taborsky, M. (2016) Cichlid fishes: A model for the integrative study of social behavior. In: Cooperative Breeding in Vertebrates: Studies of Ecology, Evolution, and Behavior. Edited by Walter D. Koenig and Janis L. Dickinson; pp. 272-293. **Cambridge University Press.**
- 173 Schuetz, D., Wirtz Ocana, S., Maan, M.E., Taborsky, M. (2016) Sexual selection promotes colonial breeding in shell-brooding cichlid fish. **Animal Behaviour**, 112: 153-161.
- 172 Quiñones, A.E., van Doorn, S., Pen, I., Weissing, F.J., Taborsky, M. (2016) Negotiation and appeasement can be more effective drivers of sociality than kin selection. **Phil. Trans. Roy. Soc. B**, 371: 20150089.
- 171 Taborsky, M., Frommen, J.G., Riehl C. (2016) Correlated pay-offs are key to cooperation. **Phil. Trans. Roy. Soc. B**, 371: 20150084.
- 170 Taborsky, M., Frommen, J.G., Riehl C. (2016) The evolution of cooperation based on direct fitness benefits. **Phil. Trans. Roy. Soc. B**, 371: 20150472.
- 169 Taborsky, M., Taborsky, B. (2015) Evolution of genetic and physiological mechanisms of cooperative behaviour. **Current Opinion in Behavioral Sciences** 6, 132-138.
- 168 Jungwirth, A., Taborsky, M. (2015) First- and second-order sociality determine survival and reproduction in cooperative cichlids. **Proc. R. Soc. B** 282: 20151971.
- 167 Jungwirth, A., Brena, P.F., Keller, I., Taborsky, M. (2015) Polygyny affects paternal care, but not survival, pair stability, and group tenure in a cooperative cichlid. **Behavioral Ecology** 27(2), 592-600.
- 166 Dolivo, V. & Taborsky, M. (2015): Cooperation among Norway rats: The importance of visual cues for reciprocal cooperation, and the role of coercion. **Ethology** 121(11), 1071-1080.
- 165 Hendrickx F., Vanthournout B., Taborsky M. (2015): Selection for costly sexual traits results in a vacant mating niche and male dimorphism. **Evolution** 69(8), 2105-2117.
- 164 Jungwirth A., Walker J., Taborsky M. (2015): Prospecting precedes dispersal and increases survival chances in cooperatively breeding cichlids. **Anim. Behav.** 106: 107-114.

- 163 von Kuerthy, C., Tschirren, L. & Taborsky, M. (2015): Alternative reproductive tactics in snail shell-brooding cichlids diverge in energy reserve allocation. **Ecol. Evol.** 5: 2060–2069.
- 162 Jungwirth, A., Josi, D., Walker, J. & Taborsky, M. (2015): Benefits of coloniality: communal defence saves anti-predator effort in cooperative breeders. **Funct. Ecol.** 29: 1218-1224.
- 161 Taborsky, M., Hofmann, H.A., Beery, A.K., Blumstein, D.T., Hayes, L.D., Lacey, E.A., Martins, E.P., Phelps, S.M., Solomon, N.G. & Rubenstein, D.R. (2015): Taxon matters: promoting integrative studies of social behavior. **Trends in Neurosciences.** 38:189-191.
- 160 Dolivo, V. & Taborsky, M. (2015): Norway rats reciprocate help according to the quality of help they received. **Biol. Lett.** 11:20140959.

For earlier publications see <http://behav.zoology.unibe.ch/index.php?p=83>