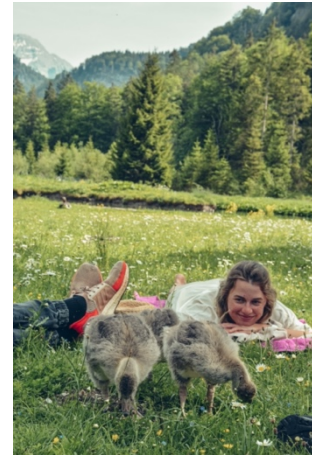# KLF Masters Project Ideas 2024

Greylag Goose: ontogeny of social behaviour in goslings
In 2024, we will hand-raise goslings and you will have opportunity to observe goslings at very close distance. Using focal sample techniques with our GooseGander app, you will score the behavioural interactions of each gosling across time (weeks, months) to measure the onset of affiliative and agonistic behavioural interactions with family and flock members. These patterns can be evaluated against measures of personality, family size, or other variables of interest. **Time period April to July**

Greylag Goose: ontogeny of vocalisations
The calls of goslings will be recorded every day/week to measure the ontogeny of calls including social context and cues to individuality in call characteristics. You will learn how to record, label, and archive calls and analyse call structure. The particular calls we are interested in include vivi calls, trills, and distress calls. **Time period April to July**

Greylag Goose: adult behaviour using scan and focal sampling
Using our GooseGander app, you will become proficient at using the two most common techniques for behavioural data collection: scan and focal sampling. The data can be used to quantify patterns of social proximity, social interactions and time budgets in adult geese. The data you collect will be part of the long-term greylag goose behavioural data repository that will be available to you for analysis, depending on the specific question you choose to develop. For example, what are time budget differences in paired geese versus singletons? How does spatial position of a goose (center vs edge) affect trade-offs in self maintenance (feeding vs vigilance behaviour)? Is social rank -- we have this information for each member of the flock -- associated with time budgets? **Project available all year**

Greylag Goose: individuality cues in adult calls
The calls of adult geese will be recorded on a regular basis to measure the social and ecological context of call types and cues to individuality in call characteristics. You will learn how to record, label, and archive calls and analyse call structure. The particular calls we are interested in include contact calls, recruitment calls, departure calls, and alarm calls. **Project available all year**

Biodiversity project
We have four biodiversity projects running for the next three years in the Alm Valley. 1) Invertebrate collection using pitfalls and sweep nets in eight meadows; half the meadows are not mowed and the other half are mowed every month. 2) Monitoring of 200 nest boxes for occupancy and fledging success. 3) Experimental tests of impacts of traffic noise on heart rate in song birds in nest boxes; measure car activity across habitat types (meadow, forest, lake, stream) using automated recorders. 4) Drone monitoring of riverine bird nests and encaging active nests of birds nesting along the pebble shores; could entail work with social media as we advocate for time-and-space sharing of certain pebble beaches during nesting. **Time period April to September**