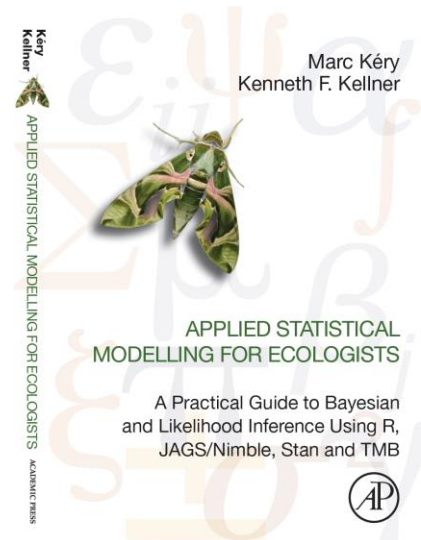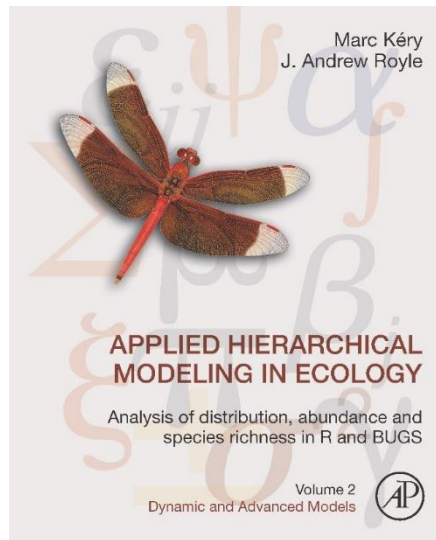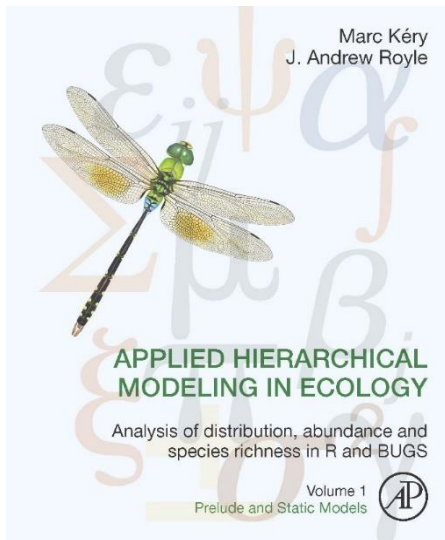# Applied hierarchical modelling (AHM) for species distribution and abundance

v. 17 May 2023

Ken Kellner, Marc Kéry,
Ben Augustine, Andy Royle

Syllabus

Morning: 9–13h, **lunch break around** 13–14h, **afternoon:** 14–17h, possibly extend to 17.30h. --- Incl. **two breaks** of 30' each around 10.30h and 15.30h. Hence, am has 3.5h (210') and pm has 2.5h (150'), for a daily total of 360'.

Monday

am/pm	Module	Topic	Reading	Duration	Who
am	1	Introduction to Statistical Inference	ASM (2)	150	Marc
pm	2	Static occupancy models	AHM1 (10)	150	Marc
pm	3	Dynamic occupancy models	AHM2 (4)	60	Ken

Tuesday

am/pm	Module	Topic	Reading	Duration	Who
am	3	Dynamic occupancy models	AHM2 (4)	120	Ken
am		Multispecies occupancy models	AHM1 (11), AHM2 (5, 8)	120	Ken
pm	4	Occupancy models with false positives	AHM2 (7)	120	Andy + Ben

Wednesday

am/pm	Module	Topic	Reading	Duration	Who
am	5	Static binomial Nmix model	AHM1 (6)	180	Ken
pm	6	Dynamic Nmix (Dail-Madsen) model	AHM2 (2)	180	Marc

Thursday

am/pm	Module	Topic	Reading	Duration	Who
am	7	Multinomial N-mixture models	AHM1 (7)	120	Andy
pm	8	Distance sampling (1)	AHM1 (8, 9)	240	Andy

Friday

am/pm	Module	Topic	Reading	Duration	Who
am	9	Distance sampling (2)	AHM1 (8, 9), AHM2 (11)	120	Andy
pm	10	Integrated models	AHM1 (10), ASM (20)	180	Marc