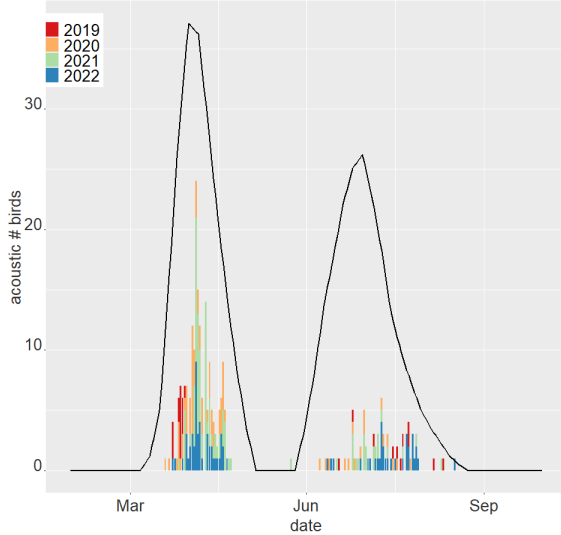


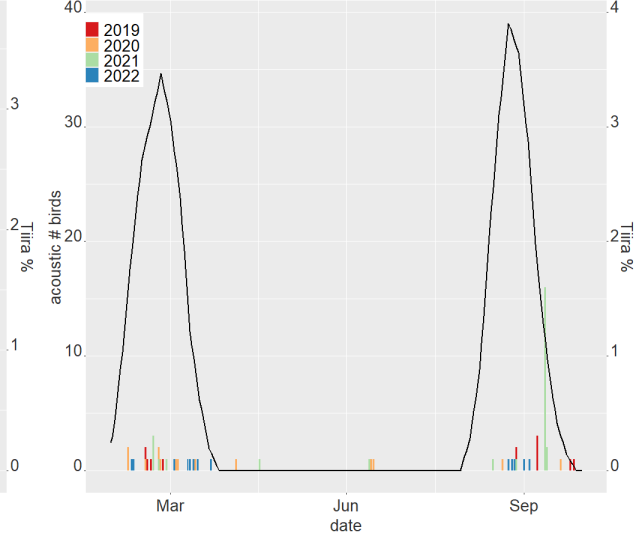
Supporting Information

Figures

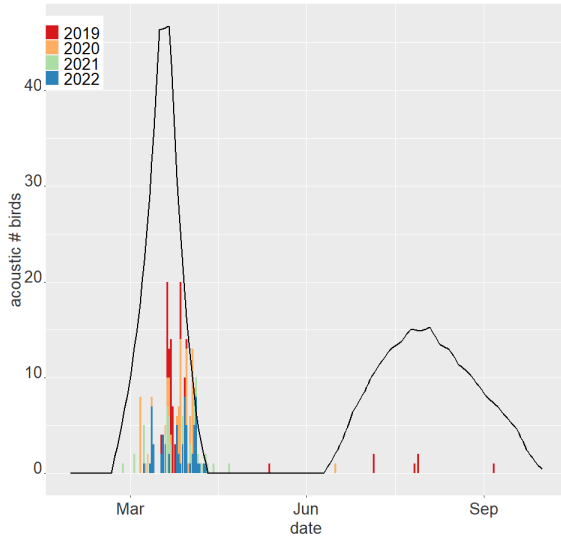
a Common sandpiper *A. hypoleucos*



b Eurasian skylark *A. arvensis*



c Teal *A. crecca*



d Wigeon *A. penelope*

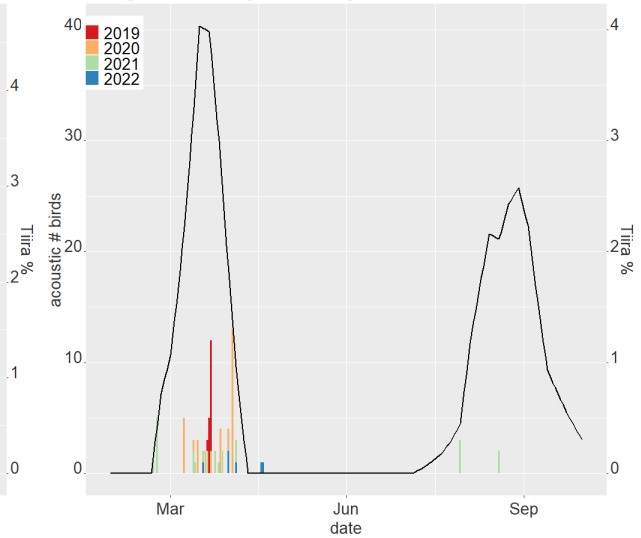


Fig. S1a-d. Acoustic counts for the years 2019-2022 (stacked color bars) and citizen science migration phenologies (black line) from the bird portal *Tiira* for species with at least 10 acoustic observations, here Common sandpiper, Eurasian skylark, Teal and Wigeon.

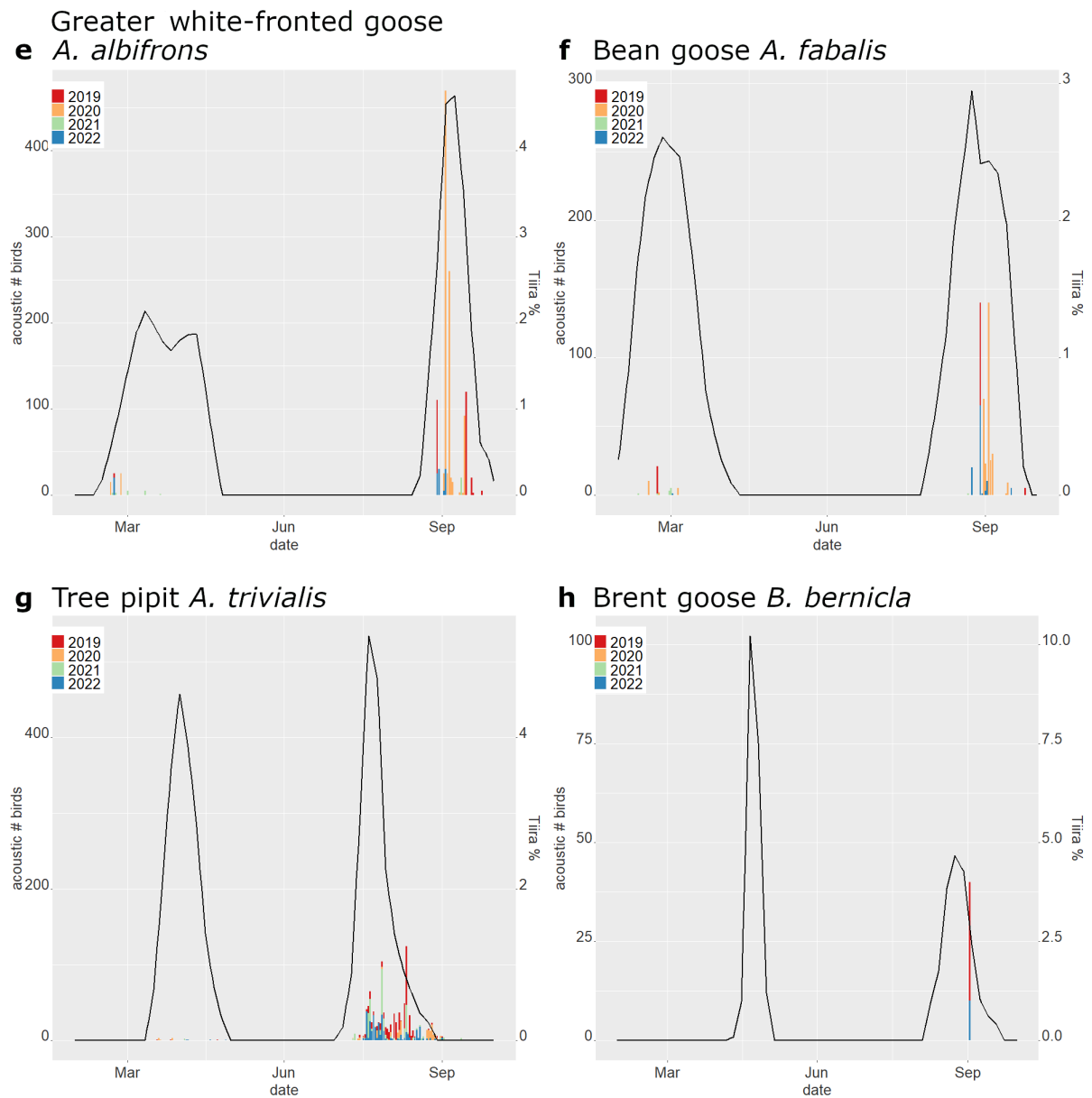
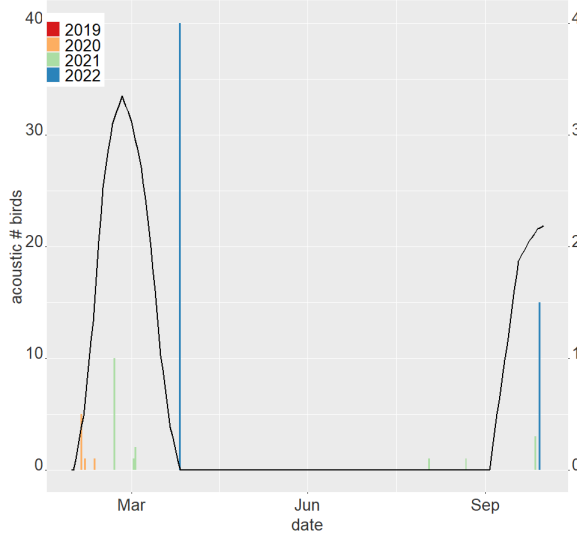
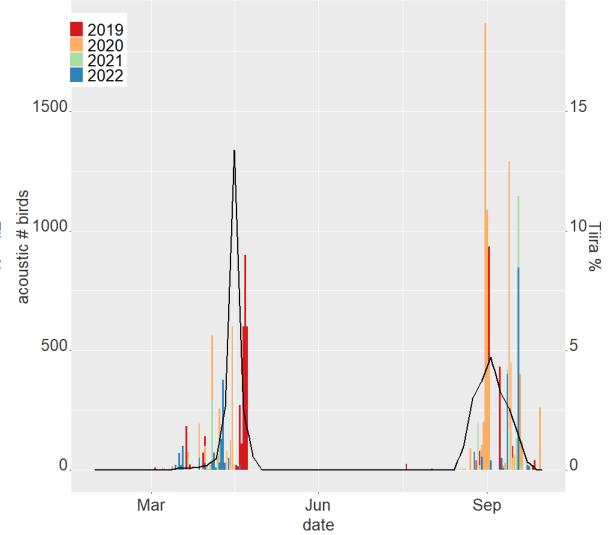


Fig. S1e-h. Acoustic counts for the years 2019-2022 (stacked color bars) and citizen science migration phenologies (black line) from the bird portal *Tiira* for species with at least 10 acoustic observations, here Greater white-fronted goose, Bean goose, Tree pipit and Brent goose.

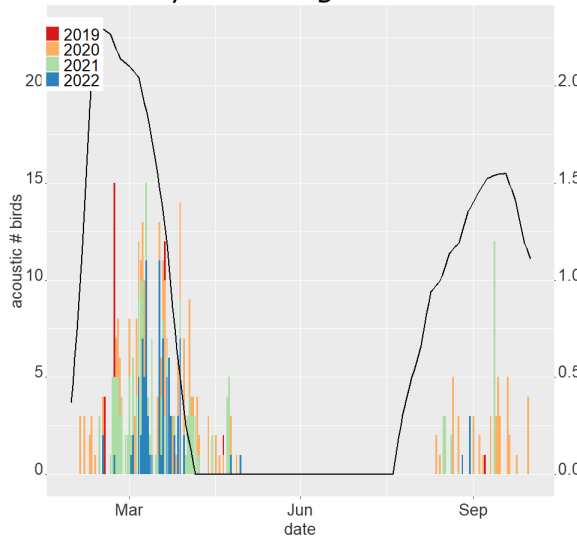
i Canada goose *B. canadensis*



j Barnacle goose *B. leucopsis*



k Goldeneye *B. clangula*



l Long-tailed duck *C. hyemalis*

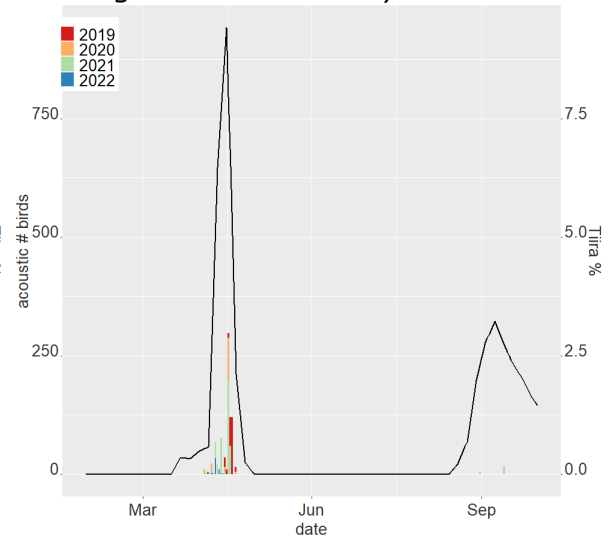
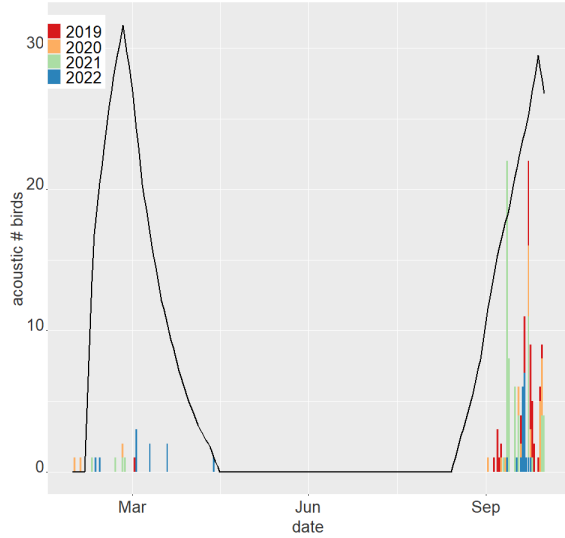
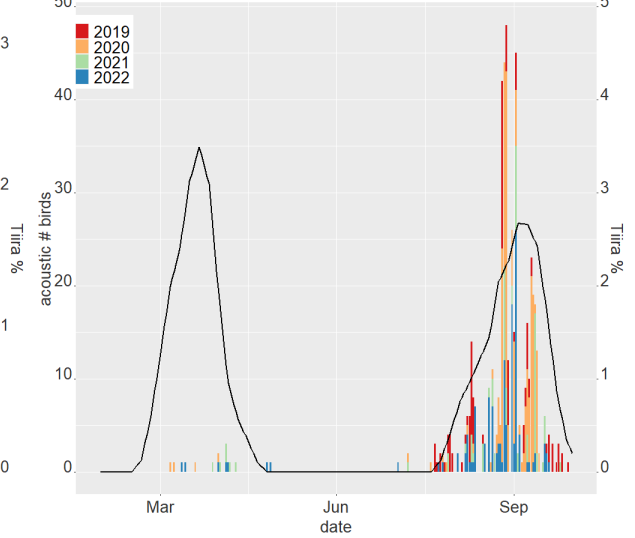


Fig. S1i-l. Acoustic counts for the years 2019-2022 (stacked color bars) and citizen science migration phenologies (black line) from the bird portal *Tiira* for species with at least 10 acoustic observations, here Canada goose, Barnacle goose, Goldeneye and Long-tailed duck.

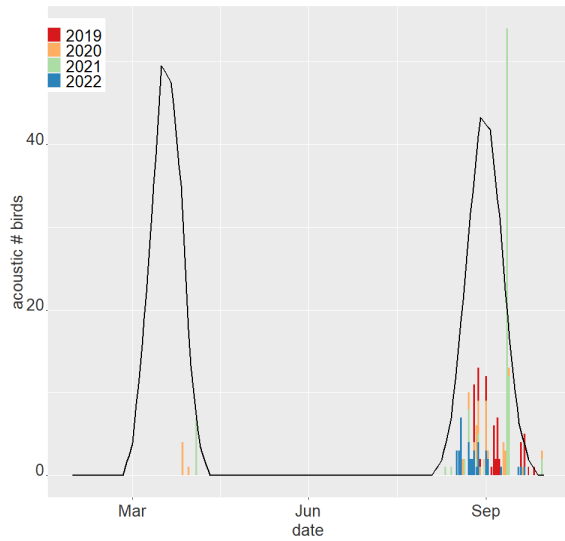
m Yellowhammer *E. citrinella*



n Robin *E. rubecula*



o Chaffinch *F. coelebs*



p Common crane *G. grus*

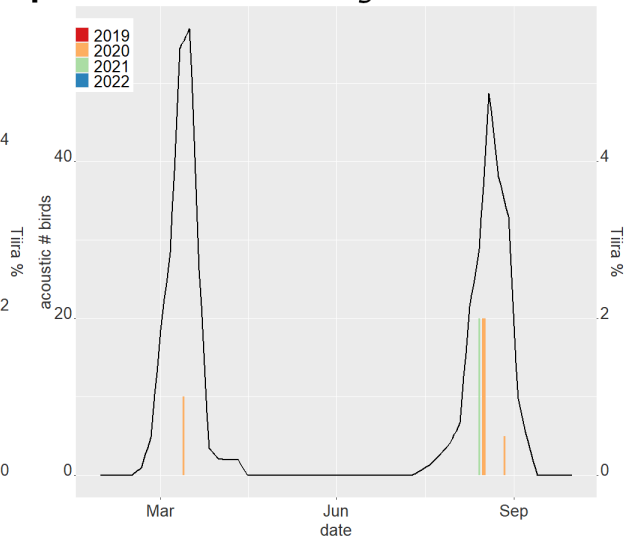
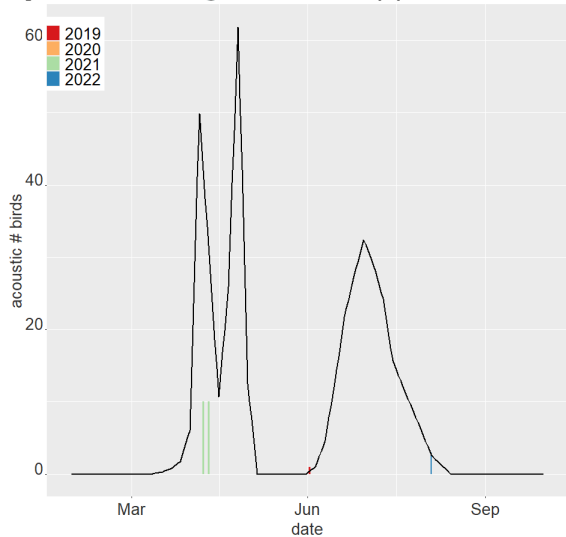
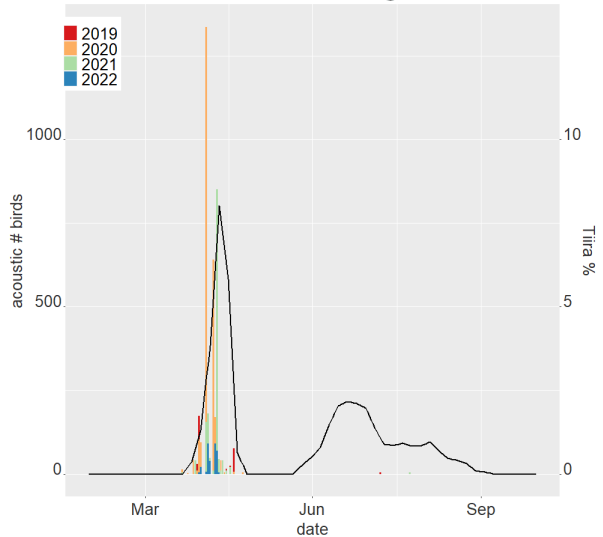


Fig. S1m-p. Acoustic counts for the years 2019-2022 (stacked color bars) and citizen science migration phenologies (black line) from the bird portal *Tiira* for species with at least 10 acoustic observations, here Yellowhammer, Robin, Chaffinch and Common crane.

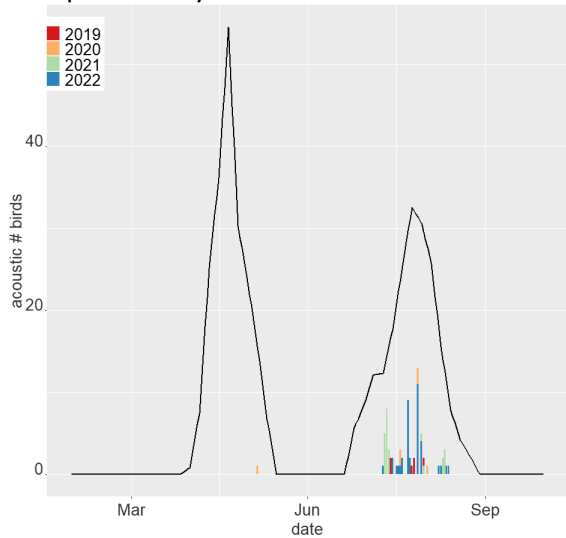
q Bar-tailed godwit *L. lapponica*



r Common scoter *M. nigra*



s Spotted flycatcher *M. striata*



t Curlew *N. arquata*

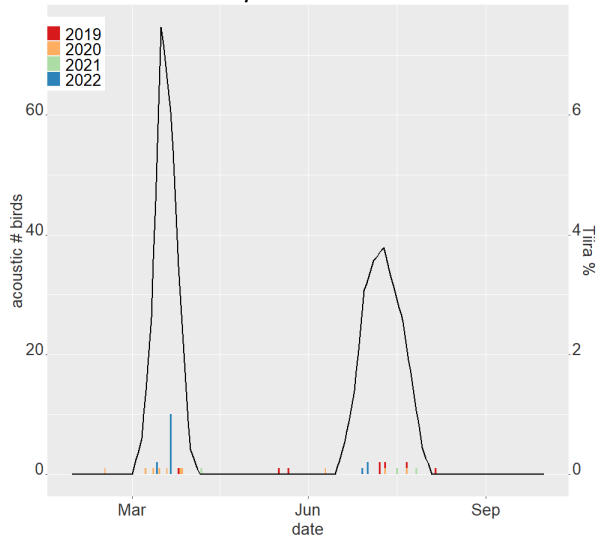
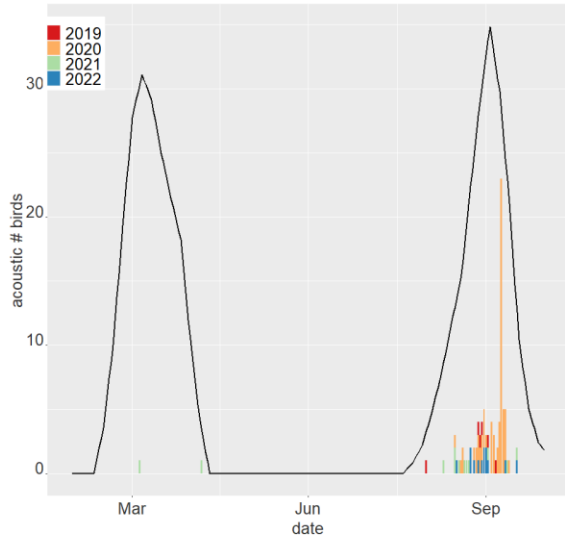
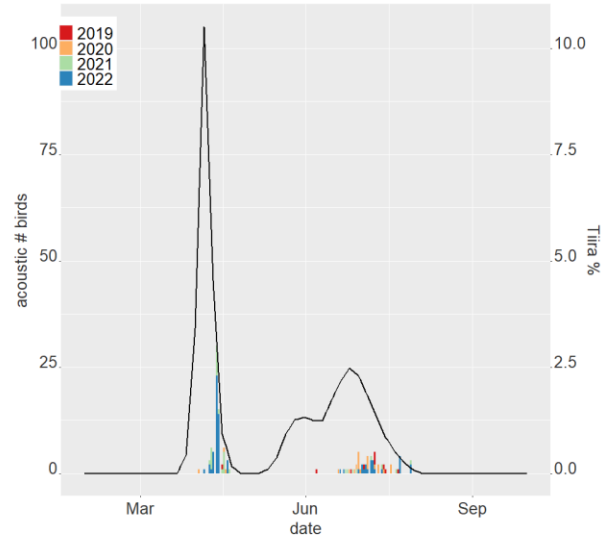


Fig. S1q-t. Acoustic counts for the years 2019-2022 (stacked color bars) and citizen science migration phenologies (black line) from the bird portal *Tiira* for species with at least 10 acoustic observations, here Bar-tailed Godwit, Common scoter, Spotted flycatcher and Curlew.

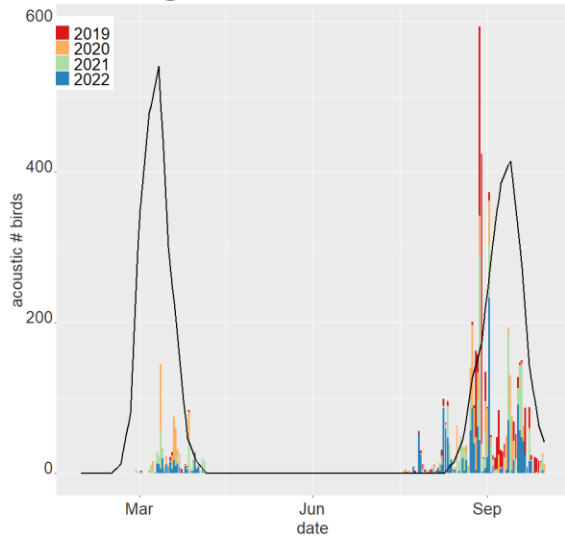
u Goldcrest *R. regulus*



v Wood sandpiper *T. glareola*



w Redwing *T. iliacus*



x Blackbird *T. merula*

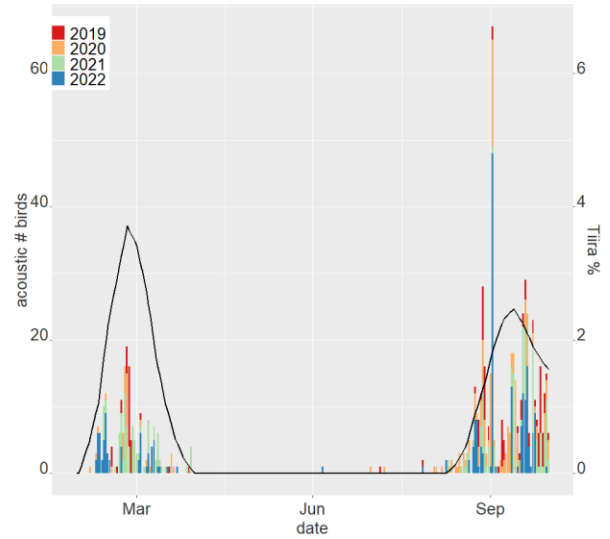
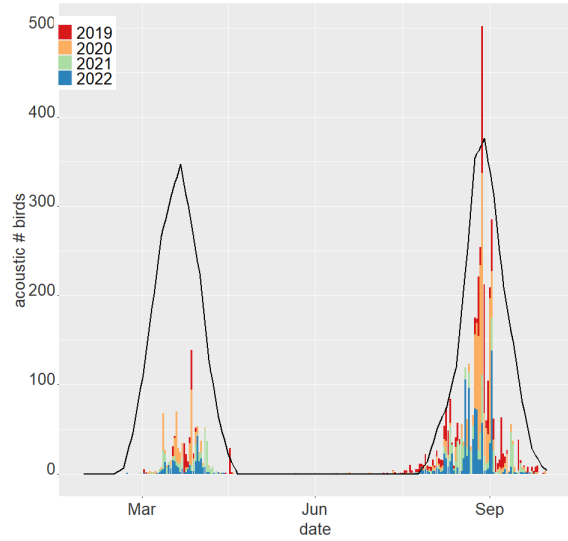


Fig. S1u-x. Acoustic counts for the years 2019-2022 (stacked color bars) and citizen science migration phenologies (black line) from the bird portal *Tiira* for species with at least 10 acoustic observations, here Goldcrest, Wood sandpiper, Redwing and Blackbird.

y Song thrush *T. philomelos*



z Fieldfare *T. pilaris*

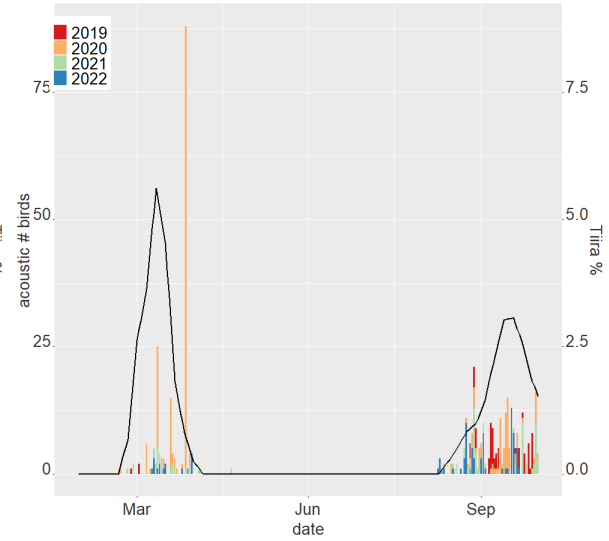


Fig. S1y-z. Acoustic counts for the years 2019-2022 (stacked color bars) and citizen science migration phenologies (black line) from the bird portal *Tiira* for species with at least 10 acoustic observations, here Song thrush and Fieldfare.

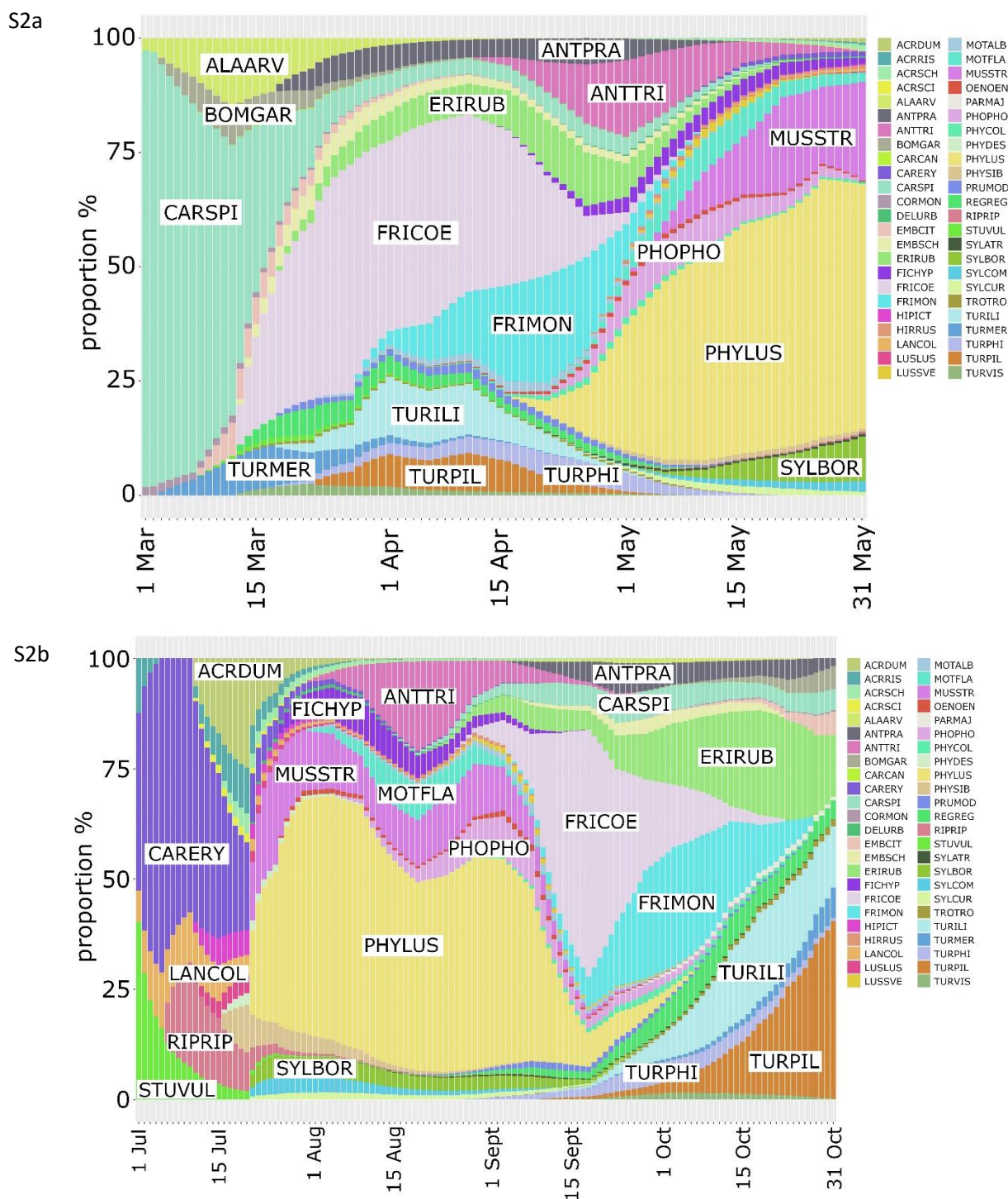
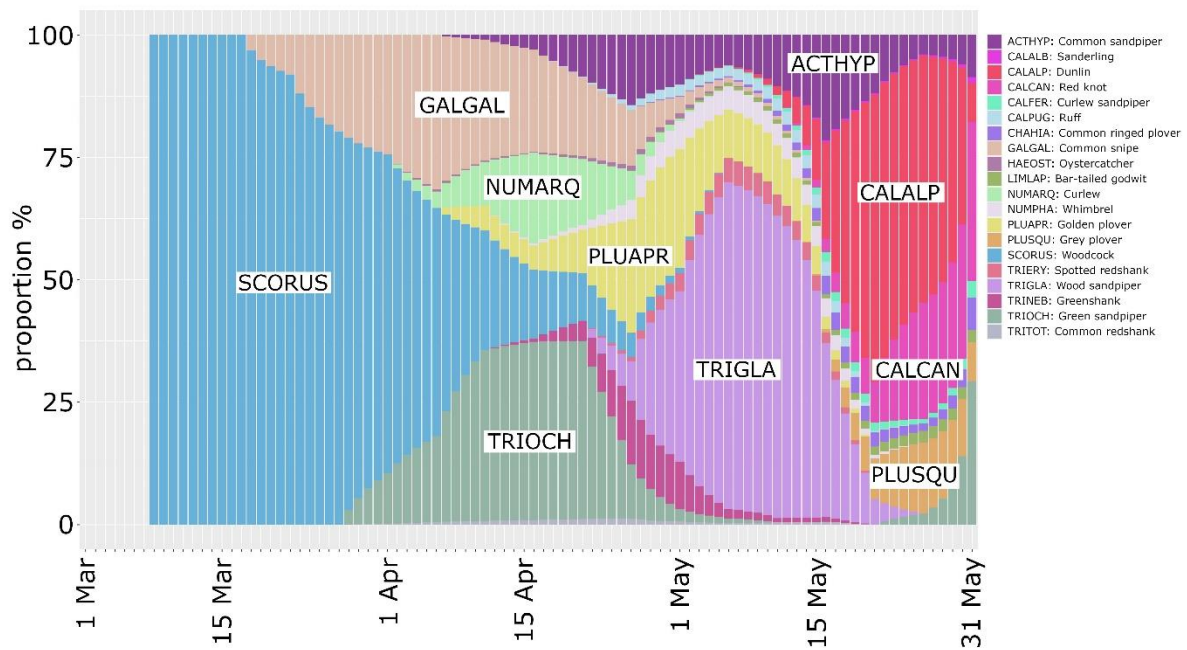


Fig S2a and S2b. Proportions of 48 passerines during spring (a) and autumn (b) migration according to their population sizes and citizen science migration schedules. The most abundant species are labelled: ACRDUM: Blyth's reed warbler; ANTPRA: Meadow pipit; ANTTTRI: Tree pipit; CARSPI: Siskin; CARERY: Common rosefinch; ERIRUB: Robin; FICHYP: Pied flycatcher; FRICOE: Chaffinch; FRIMON: Brambling; LANCOL: Red-backed shrike; MOTFLA: Yellow wagtail; MUSSTR: Spotted flycatcher; PHOPHO: Common redstart; PHYLUS: Willow warbler; RIPRIP: Sand martin; STUVUL: Starling; SYLBOR: Garden warbler; TURILI: Redwing; TURPHI: Song thrush; TURPIL: Fieldfare. For complete abbreviation list see Table S1.

S2c



S2d

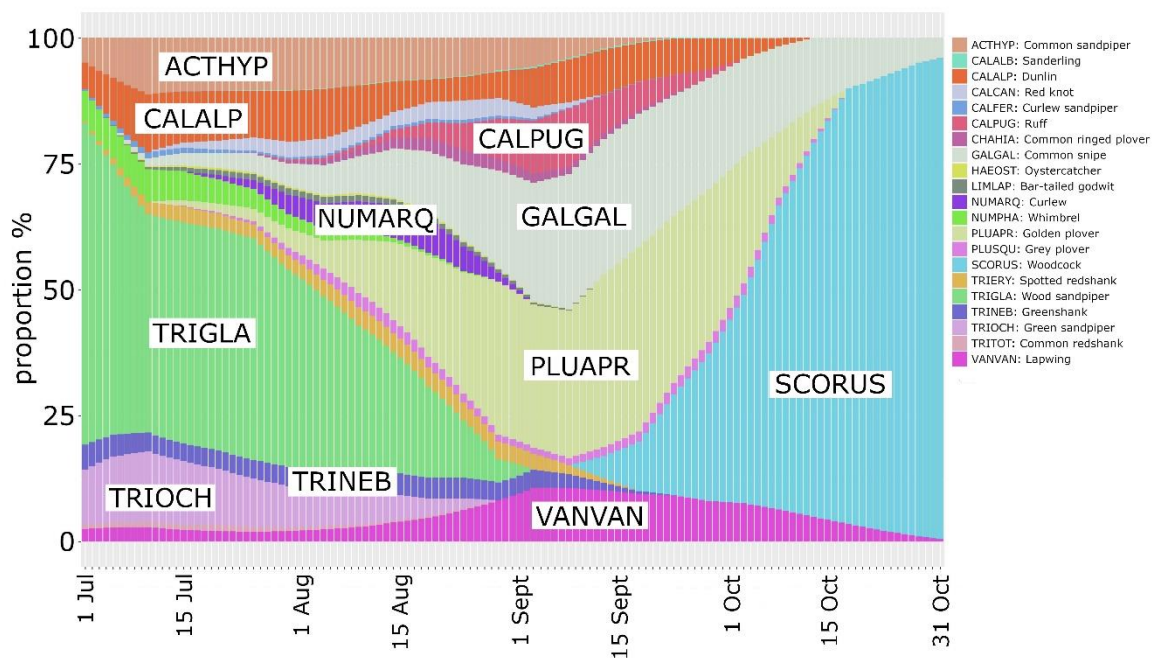
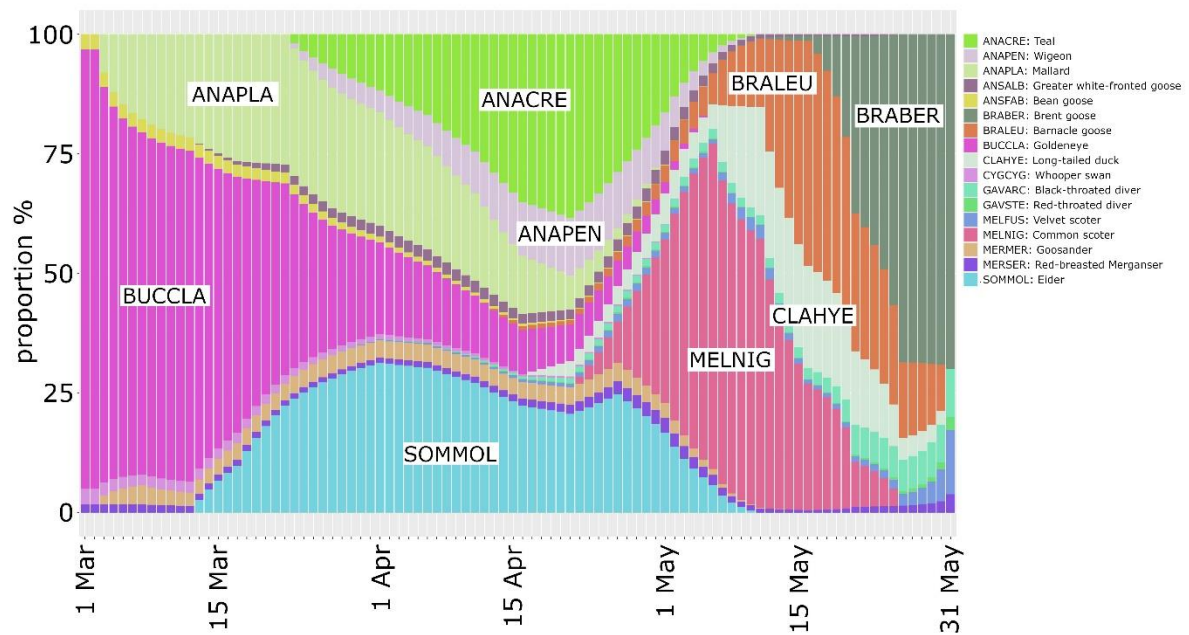


Fig S2c and S2d. Proportions of 21 wader species of wader populations during spring (c) and autumn (d) migration according to their population sizes and citizen science migration schedules. The most abundant species are labelled.

S2e



S2f

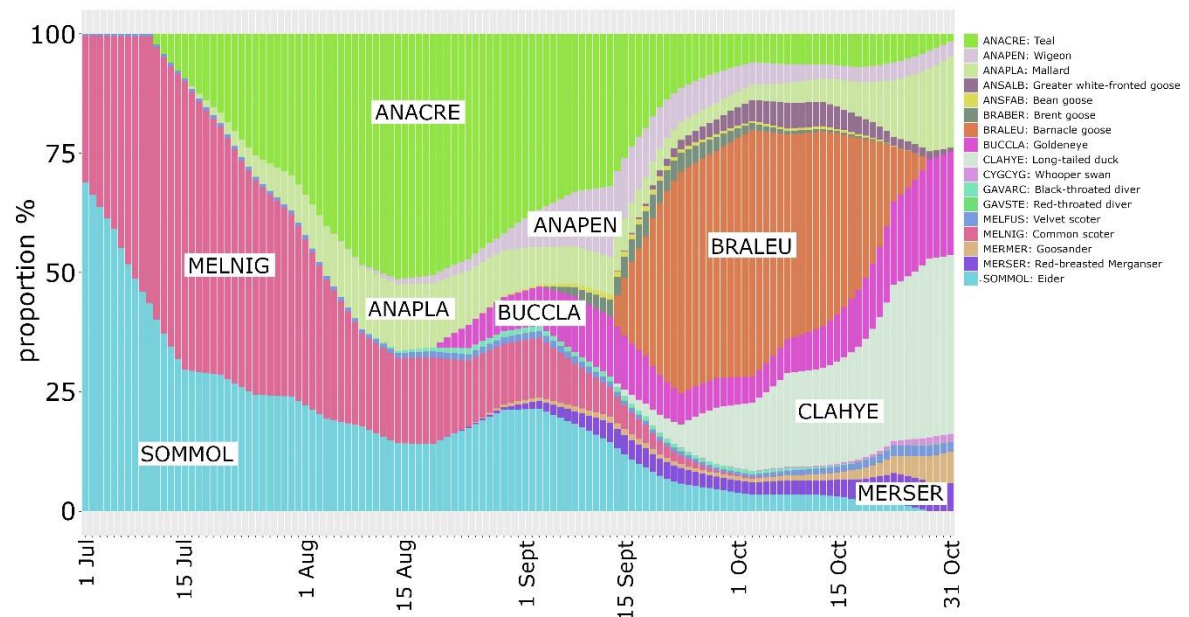


Fig S2e and S2f. Proportion of 17 waterfowl species during spring (e) and autumn (f) migration according to their population sizes and citizen science migration schedules. The most abundant species are labelled.