NHZ 20. Border Hills

Figure 1: NHZ 20. Border Hills**.**

Trends in breeding numbers are available for five species and trends in breeding success for eight of the 13 species for which the SRMS holds records for NHZ 20. Border Hills (Table 1).

Osprey

No trend is available for the number of breeding pairs but breeding success showed no significant change. No trends are available for clutch size, brood size or the number of fledglings (Figure 2).

Goshawk

No trend is available for the number of breeding pairs but breeding success showed no significant change. No trends are available for clutch size or brood size but number of fledglings showed no significant change (Figure 3).

Hen Harrier

Breeding numbers showed no significant change. No trends are available for breeding success, clutch size, brood size or the number of fledglings (Figure 4176).

Buzzard

No trend is available for the number of breeding pairs but breeding success showed no significant change. Trends are not available for clutch size or brood size but the number of fledglings showed no significant change (Figure 5).

Barn Owl

No trend is available for the number of breeding pairs but breeding success showed no significant change. There was no significant change in clutch

size but the number of fledglings decreased significantly (-3%). No trend is available for brood size (Figure 6).

Tawny Owl

No trend is available for the number of breeding pairs but breeding success showed a non-linear relationship. Trends for clutch size, brood size and the number of fledglings all showed no significant change (Figure 7).

Kestrel

The number of breeding pairs showed no significant change. No trends are available for breeding success, clutch size, brood size or the number of fledglings (Figure 8).

Merlin

The number of breeding pairs showed no significant change while breeding success decreased significantly (-1.3%). No trends are available for clutch size, brood size or the number of fledglings (Figure 9).

Peregrine

The number of breeding pairs and breeding success showed no significant change. Trends in clutch size, brood size and the number of fledglings all showed no significant change (Figure 10).

Raven

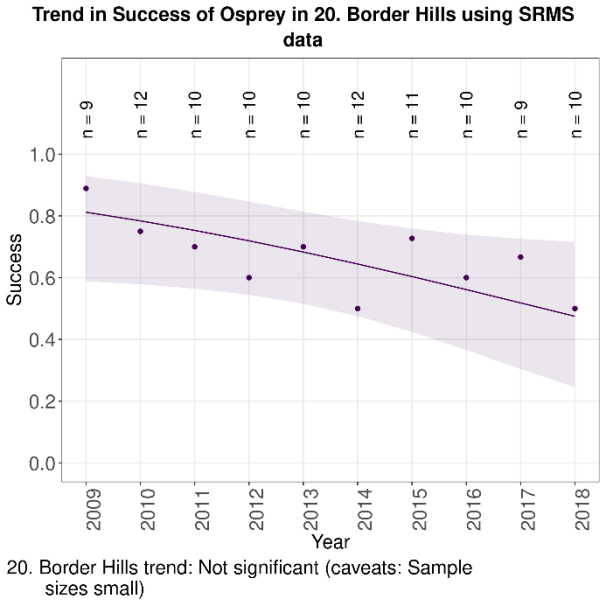
The number of breeding pairs and breeding success showed no significant change. Trends are not available for clutch size or brood size but the number of fledglings showed no significant change (Figure 11).

Table 1: Summary of SRMS trends for NHZ 20. Border Hills during 2009-2018. Figures in parentheses indicate the annual change, with significant decreases highlighted in blue and non-significant changes highlighted in grey. '—' indicates where the species occurs but no trend is available. 'Absent' indicates where the species is not known to breed.

Species:	Pairs	Success	Clutch size	Brood size	Number of fledglings
Osprey	—	Not significant [s]	—	—	—
Golden Eagle	—	—	—	—	—
Sparrowhawk	—	—	—	—	—
Goshawk	—	Not significant [s]	—	—	Not significant [rs]
Hen Harrier	Not significant [s]	—	—	—	—
Red Kite	—	—	—	—	—
White-tailed Eagle	Absent	Absent	Absent	Absent	Absent
Buzzard	—	Not significant [rs]	—	—	Not significant [rs]
Barn Owl	—	Not significant [n]	Not significant [nrs]	—	**Decrease [nr] (-3%)**
Tawny Owl	—	Non-linear	Not significant [nrs]	Not significant [nrs]	Not significant [ns]
Kestrel	Not significant [s]	—	—	—	—
Merlin	Not significant	**Decrease [s] (-1.3%)**	—	—	—
Peregrine	Not significant	Not significant	Not significant [rs]	Not significant [rs]	Not significant [rs]
Raven	Not significant [v]	Not significant [r]	—	—	Not significant [rs]

[n] Nestbox based, [r] No home range random effect, [s] Sample sizes small, [v] Variable effort.

No trend available
for breeding pairs



20. Border Hills trend: Not significant (caveats: Sample sizes small)

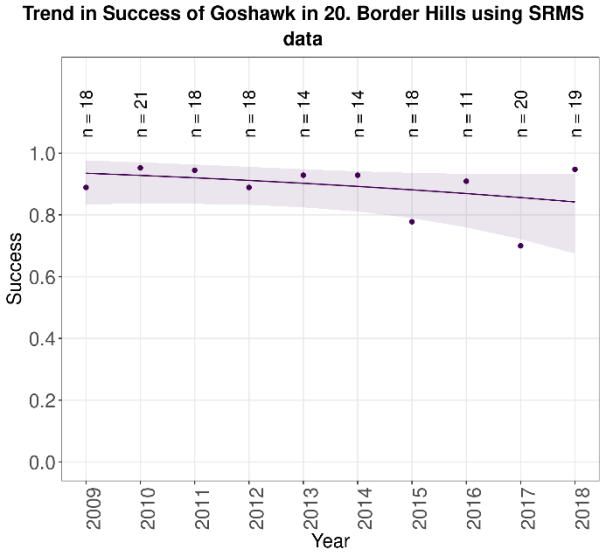
No trend available
for clutch size

No trend available
for brood size

No trend available
for number of fledglings

Figure 2: Trends in breeding pairs, success, clutch size, brood size and the number of fledglings of Osprey in NHZ 20. Border Hills during 2009-2018.

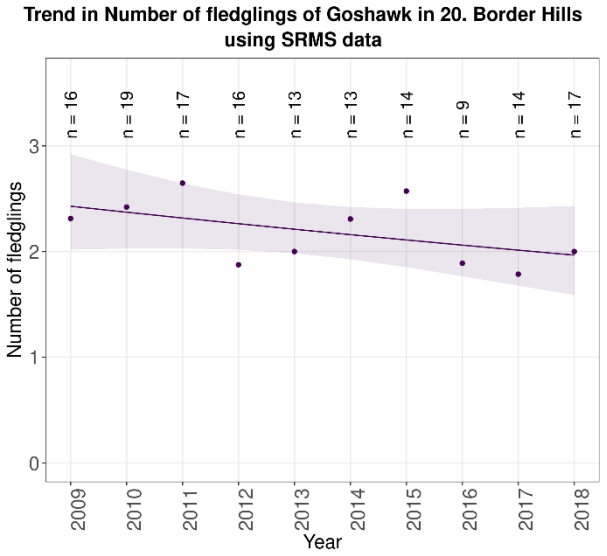
No trend available for breeding pairs



20. Border Hills trend: Not significant (caveats: Sample sizes small)

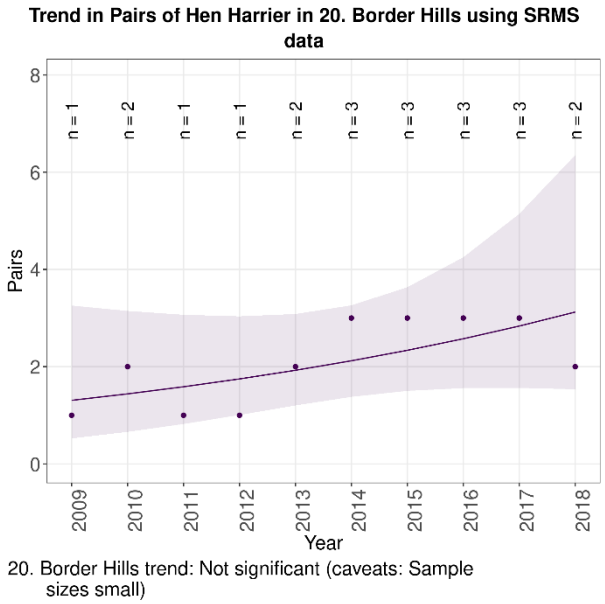
No trend available for clutch size

No trend available for brood size



20. Border Hills trend: Not significant (caveats: Sample sizes small; No home range random effect)

Figure 3: Trends in breeding pairs, success, clutch size, brood size and the number of fledglings of Goshawk in NHZ 20. Border Hills during 2009-2018.



No trend available for breeding success

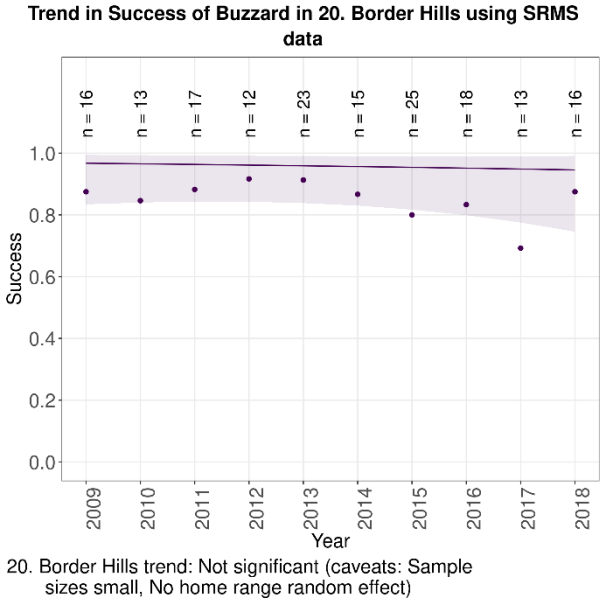
No trend available for clutch size

No trend available for brood size

No trend available for number of fledglings

Figure 4: Trends in breeding pairs, success, clutch size, brood size and the number of fledglings of Hen Harrier in NHZ 20. Border Hills during 2009-2018.

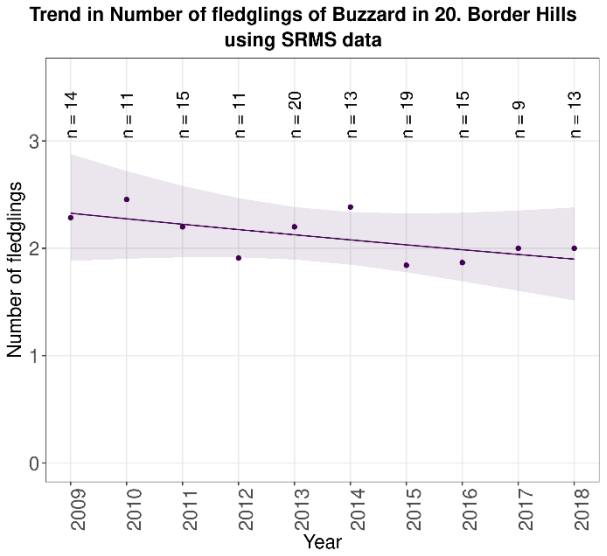
No trend available for breeding pairs



20. Border Hills trend: Not significant (caveats: Sample sizes small, No home range random effect)

No trend available for clutch size

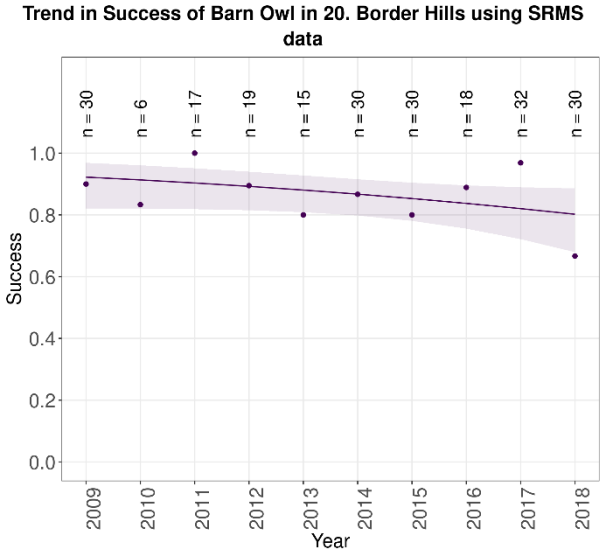
No trend available for brood size



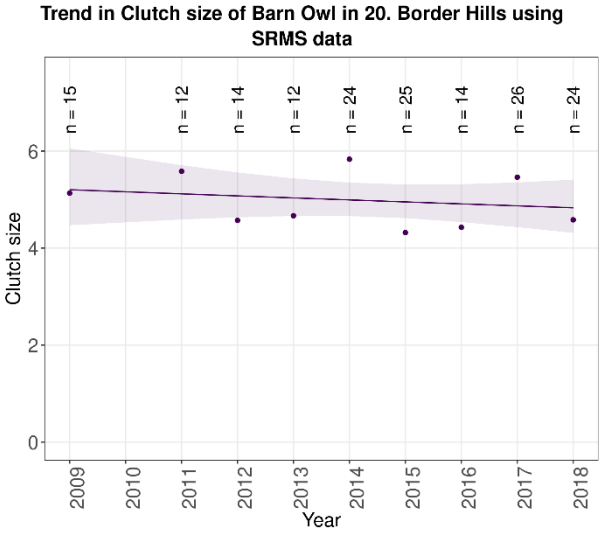
20. Border Hills trend: Not significant (caveats: Sample sizes small; No home range random effect)

Figure 5: Trends in breeding pairs, success, clutch size, brood size and the number of fledglings of Buzzard in NHZ 20. Border Hills during 2009-2018.

No trend available for breeding pairs

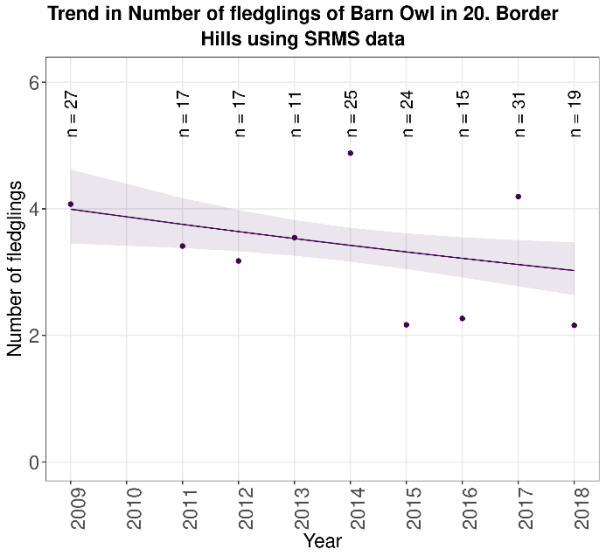


20. Border Hills trend: Not significant (caveats: Nestbox based;)



20. Border Hills trend: Not significant (caveats: Nestbox based; Sample sizes small; No home range random effect;)

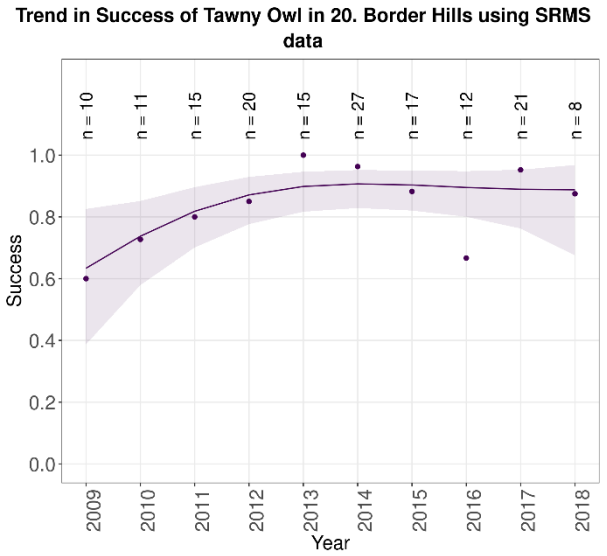
No trend available for brood size



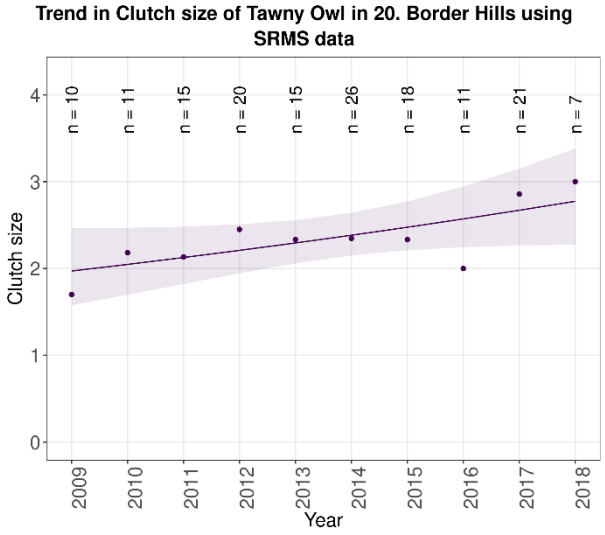
20. Border Hills trend: Decrease (caveats: Nestbox based; No home range random effect;)

Figure 6: Trends in breeding pairs, success, clutch size, brood size and the number of fledglings of Barn Owl in NHZ 20. Border Hills during 2009-2018.

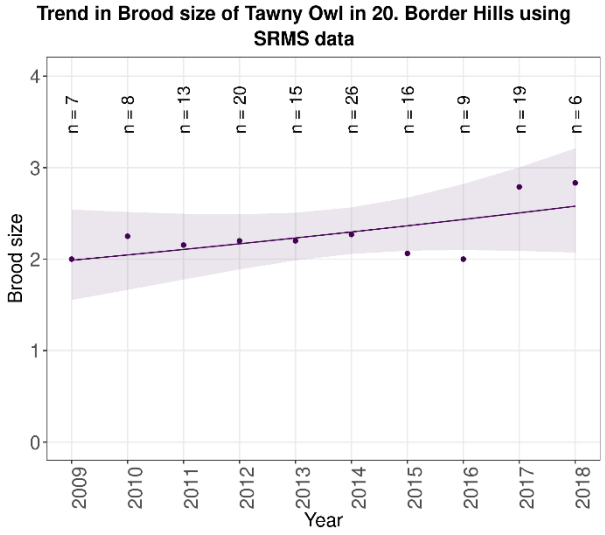
No trend available for breeding pairs



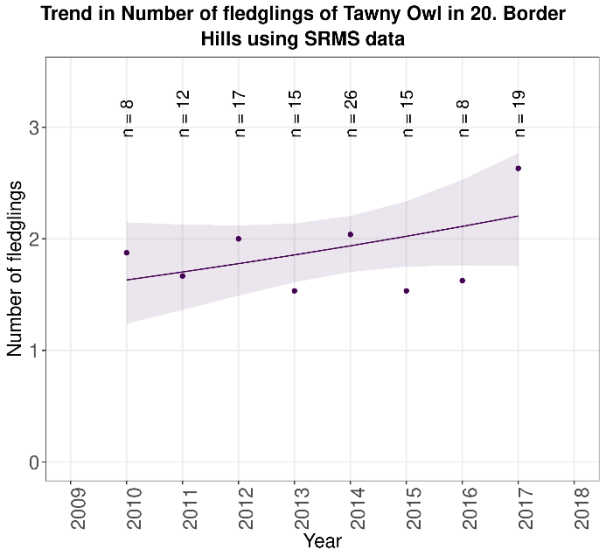
20. Border Hills trend: Non-linear (caveats: Sample-size small; Nestbox based;)



20. Border Hills trend: Not significant (caveats: Nestbox based; Sample sizes small; No home range random effect;)

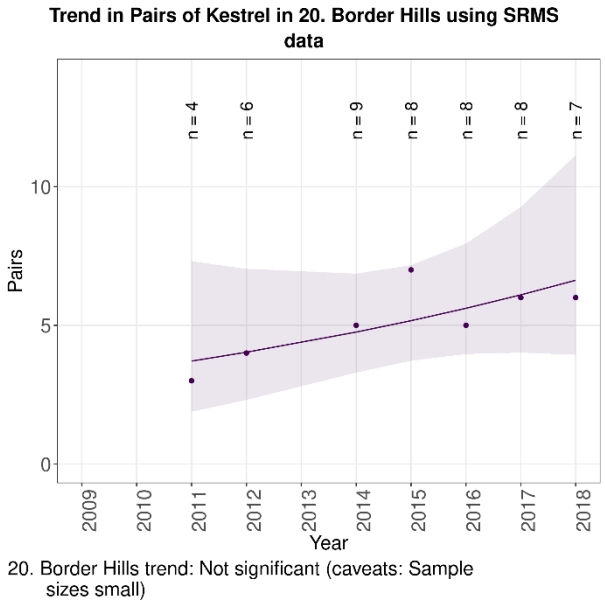


20. Border Hills trend: Not significant (caveats: Nestbox based; Sample sizes small; No home range random effect;)



20. Border Hills trend: Not significant (caveats: Nestbox based; Sample sizes small)

Figure 7: Trends in breeding pairs, success, clutch size, brood size and the number of fledglings of Tawny Owl in NHZ 20. Border Hills during 2009-2018.



20. Border Hills trend: Not significant (caveats: Sample sizes small)

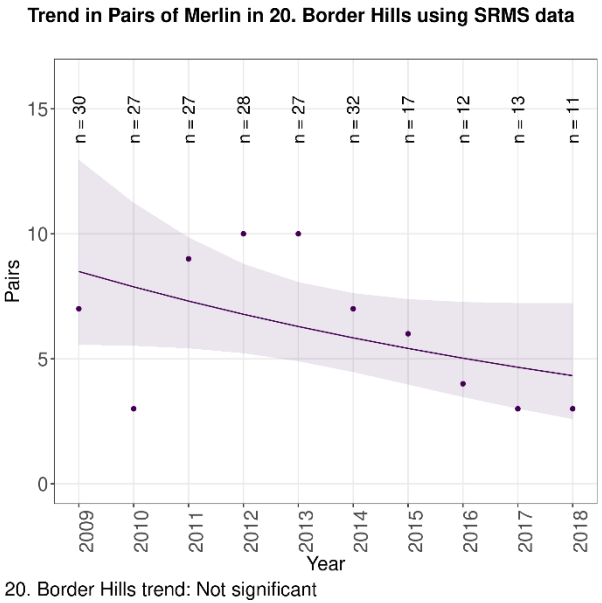
No trend available for breeding success

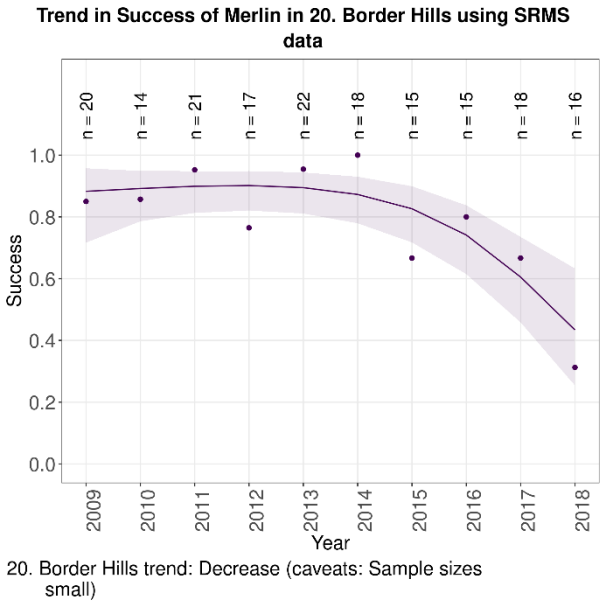
No trend available for clutch size

No trend available for brood size

No trend available for number of fledglings

Figure 8: Trends in breeding pairs, success, clutch size, brood size and the number of fledglings of Kestrel in NHZ 20. Border Hills during 2009-2018.



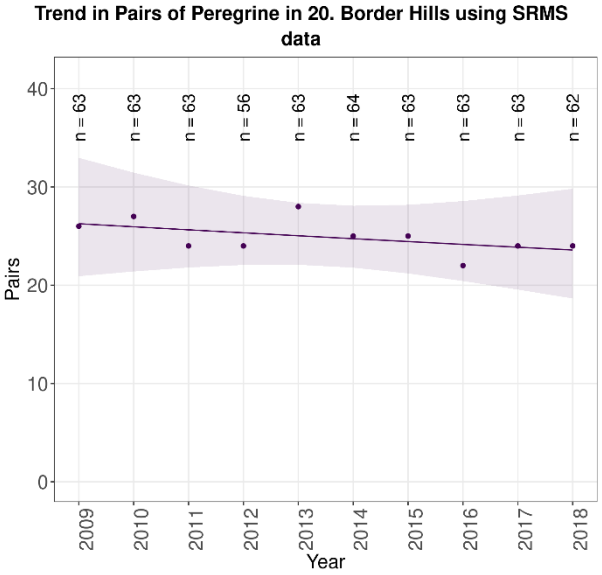


No trend available for clutch size

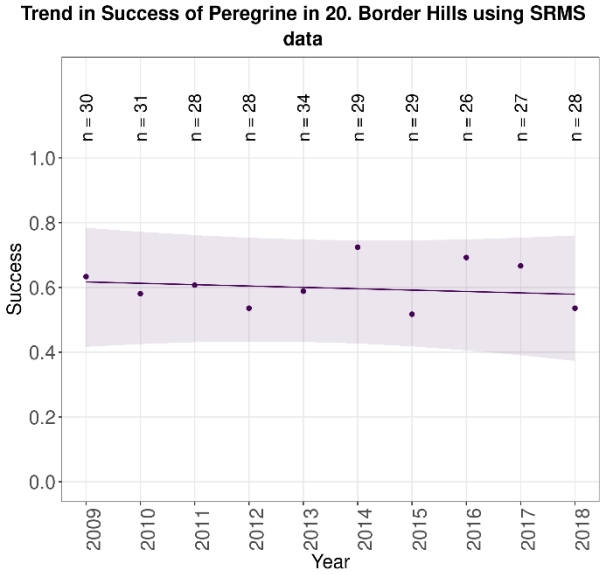
No trend available for brood size

No trend available for number of fledglings

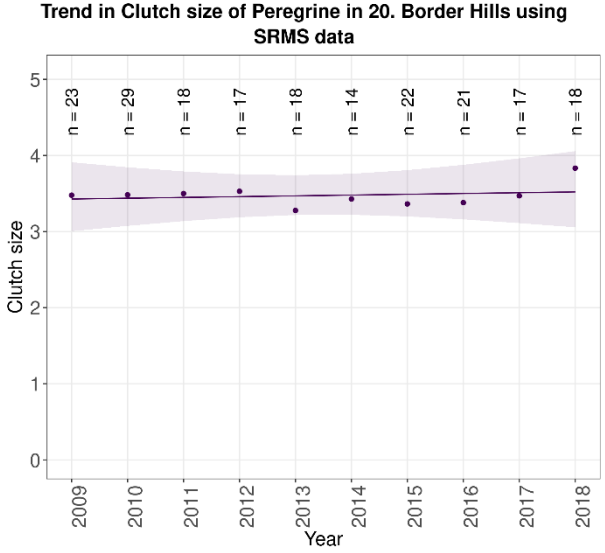
Figure 9: Trends in breeding pairs, success, clutch size, brood size and the number of fledglings of Merlin in NHZ 20. Border Hills during 2009-2018.



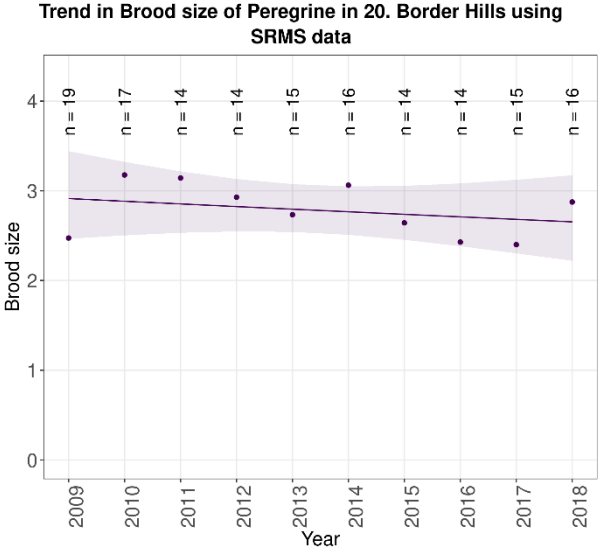
20. Border Hills trend: Not significant



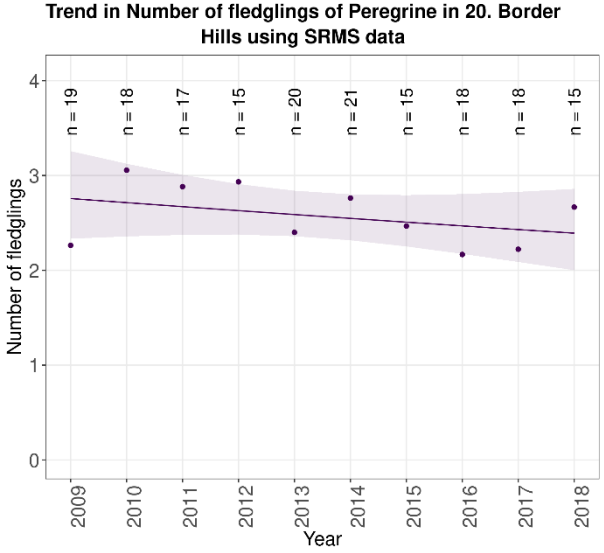
20. Border Hills trend: Not significant



20. Border Hills trend: Not significant (caveats: Sample sizes small; No home range random effect)

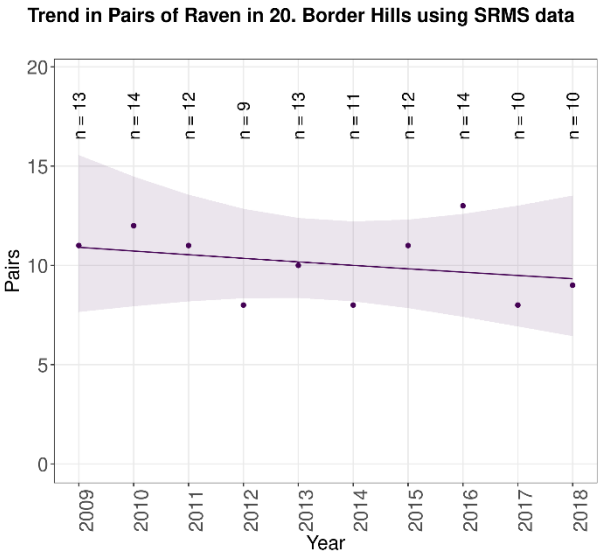


20. Border Hills trend: Not significant (caveats: Sample sizes small; No home range random effect)

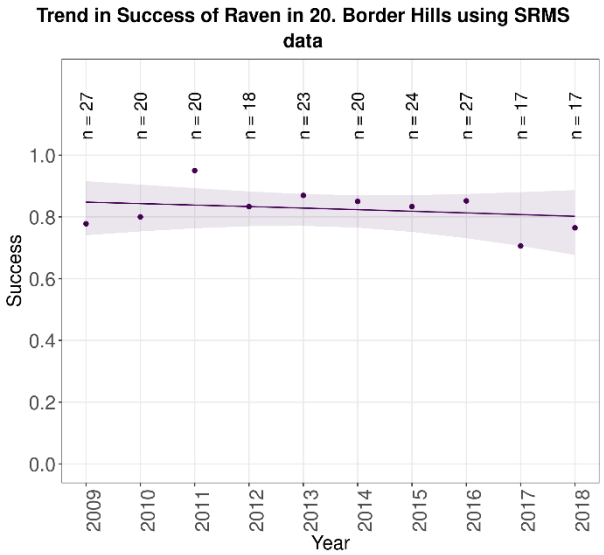


20. Border Hills trend: Not significant (caveats: Sample sizes small; No home range random effect)

Figure 10: Trends in breeding pairs, success, clutch size, brood size and the number of fledglings of Peregrine in NHZ 20. Border Hills during 2009-2018.



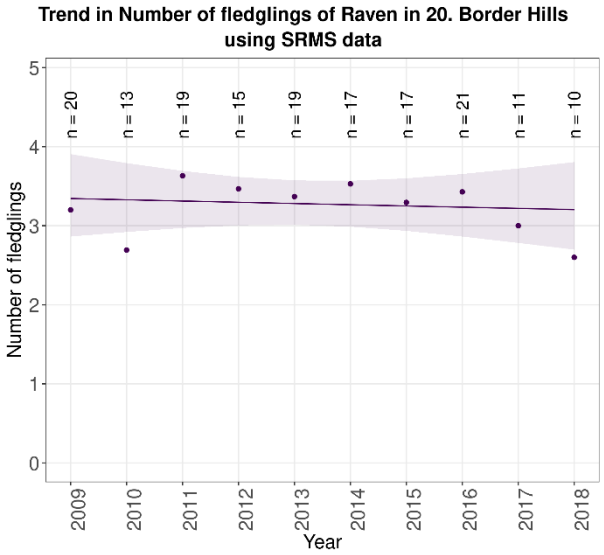
20. Border Hills trend: Not significant (caveats: Variable effort)



20. Border Hills trend: Not significant (caveats: No home range random effect)

No trend available for clutch size

No trend available for brood size



20. Border Hills trend: Not significant (caveats: Sample sizes small; No home range random effect)

Figure 11: Trends in breeding pairs, success, clutch size, brood size and the number of fledglings of Raven in NHZ 20. Border Hills during 2009-2018.