

Birds that feed in flocks commonly retire together into roosts.

The reasons for roosting communally are not always obvious, but there are some likely benefits.

In winter especially, it is important for birds to keep warm at night and conserve precious food reserves.

One way to do this is to find a sheltered roost.

Solitary roosters shelter in dense vegetation or enter a cavity - horned larks dig holes in the ground and ptarmigan burrow into snow banks - but the effect of sheltering is magnified by several birds huddling together in the roosts, as wrens, swifts, brown creepers, bluebirds, and anis do.

Body contact reduces the surface area exposed to the cold air, so the birds keep each other warm.

Two kinglets huddling together were found to reduce their heat losses by a quarter and three together saved a third of their heat.

The second possible benefit of communal roosts is that they act as "information centers.

" During the day, parties of birds will have spread out to forage over a very large area.

When they return in the evening some will have fed well, but others may have found little to eat.

Some investigators have observed that when the birds set out again next morning, those birds that did not feed well on the previous day appear to follow those that did.

The behavior of common and lesser kestrels may illustrate different feeding behaviors of similar birds with different roosting habits.

The common kestrel hunts vertebrate animals in a small, familiar hunting ground, whereas the very similar lesser kestrel feeds on insects over a large area.

The common kestrel roosts and hunts alone, but the lesser kestrel roosts and hunts in flocks, possibly so one bird can learn from others where to find insect swarms.

Finally, there is safety in numbers at communal roosts since there will always be a few birds awake at any given moment to give the alarm.

But this increased protection is partially counteracted by the fact that mass roosts attract predators and are especially vulnerable if they are on the ground.

Even those in trees can be attacked by birds of prey.

The birds on the edge are at greatest risk since predators find it easier to catch small birds perching at the margins of the roost.