

Ecography

E4831

Yamaura, Y., Katoh, K. and Takahashi, T. 2006. Reversing habitat loss: deciduous habitat fragmentation matters to birds in a larch plantation matrix. – *Ecography* 29: 827–834.

Appendix. Assignment of bird species to groups.

Common name	Scientific name	Season	Winter guild	Breeding guild	Nest location
Black-faced bunting	<i>Emberiza spodocephala</i>	Breeding		Ground, early successional	Ground, shrub
Blue-and-white flycatcher	<i>Cyanoptila cyanomelana</i>	Breeding		Flycatcher	Ground
Brambling	<i>Fringilla montifringilla</i>	Winter	Seed		Shrub
Brown thrush	<i>Turdus chrysolaus</i>	Breeding		Ground	Shrub
Brown-eared bulbul	<i>Hypsipetes amaurotis</i>	Breeding		Omnivore	Shrub
Bullfinch	<i>Pyrrhula pyrrhula</i>	Both	Seed	Canopy, hemlock-fir	Shrub
Bush warbler	<i>Cettia diphone</i>	Breeding		Shrub	Shrub
Coal tit	<i>Parus ater</i>	Both	Canopy, hemlock-fir	Canopy, hemlock-fir	Tree
Copper pheasant	<i>Phasianus soemmerringii</i>	Breeding		Ground	Ground
Eastern crowned warbler	<i>Pylloscopus coronatus</i>	Breeding		Shrub	Ground
Goldcrest	<i>Regulus regulus</i>	Winter	Canopy, hemlock-fir		Tree
Great spotted woodpecker	<i>Dendrocopos major</i>	Winter	Stem		Tree
Great tit	<i>Parus major</i>	Both	Canopy	Canopy	Tree
Indian tree pipit	<i>Anthus hodgsoni</i>	Breeding		Ground, early successional	Ground
Japanese grey thrush	<i>Turdus cardis</i>	Breeding		Ground	Shrub
Japanese grosbeak	<i>Eophona personata</i>	Both	Seed	Canopy	Tree
Japanese pygmy woodpecker	<i>Dendrocopos kizuki</i>	Both	Stem	Stem	Tree
Japanese white-eye	<i>Zosterops japonica</i>	Both	Canopy	Canopy	Shrub
Jay	<i>Garrulus glandarius</i>	Both	Seed	Omnivore	Tree
“Large woodpeckers”		Breeding		Stem	Tree
Long-tailed tit	<i>Aegithalos caudatus</i>	Both	Canopy	Canopy	Tree
Narcissus flycatcher	<i>Ficedula narcissina</i>	Breeding		Flycatcher	Tree
Nuthatch	<i>Sitta europaea</i>	Both	Stem	Stem	Tree
Red-flanked bluetail	<i>Tarsiger cyanurus</i>	Winter	Ground, shrub		Ground
Short-tailed bush warbler	<i>Urosphena squameiceps</i>	Breeding		Shrub	Ground
Siberian blue robin	<i>Luscinia cyane</i>	Breeding		Ground, shrub	Ground
Siberian meadow bunting	<i>Emberiza cioides</i>	Breeding		Ground, early successional	Ground, shrub
Treecreeper	<i>Certhia familiaris</i>	Both	Stem, hemlock-fir	Stem, hemlock-fir	Tree
Varied tit	<i>Parus varius</i>	Both	Canopy	Canopy	Tree
Willow tit	<i>Parus montanus</i>	Both	Canopy	Canopy	Tree
Wren	<i>Troglodytes troglodytes</i>	Winter	Ground		Ground

Species that had more than one foraging strategy were assigned to multiple groups. Occurrences of the great spotted woodpecker *Dendrocopos major* and the Japanese green woodpecker *Picus awokera* were combined and treated as “large woodpeckers” in the breeding season because of the difficulty in identifying these species in the field. Species suggested to prefer hemlock and fir forests were assigned to the “hemlock-fir” foraging group. Nest-site substrates were assigned to three types following Kurosawa and Askins (2003): ground (<50 cm in height), shrub (<5 m in height excluding cavity nesters), and tree (> 5 m in height and cavity nesters).

References

Kurosawa, R. and Askins, R. A. 2003. Effects of habitat fragmentation on birds in deciduous forests in Japan. – *Conserv. Biol.* 17: 695–707.