Supporting information for the paper
Ullerud et al. "Consistency in land cover mapping: influence of fieldworkers, spatial scale and classification system." *Applied Vegetation Science.*

Appendix S3. Method for and results of the confusion matrix analysis.

Table 1 Confusion matrix for a pair of hypothetical maps A and B including three units: x, y and z (following Cherrill & McClean 1999). Diagonal elements of the matrix, shown in brackets, represent consistent classifications (not used in further calculations), and non-diagonal elements represent inconsistent classifications (confusion).

		Map A		
		Unit x	**Unit y**	**Unit z**
Map B	**Unit x**	(A_xB_x)	A_yB_x	A_zB_x
	Unit y	A_xB_y	(A_yB_y)	A_zB_y
	Unit z	A_xB_z	A_yB_z	(A_zB_z)

Table 2 Units in each system used for analysis of consistency in classification (confusion matrix).

Ecosystem	The most common NIBIO units	The most common NiN units
Forest	4b Bilberry birch forest 7b Bilberry spruce forest 7c Meadow spruce forest	T4-C1 Bilberry forest T4-C2 Sparse low-herb forest T4-C5 Heather-bilberry forest
Mountain heath	2c Lichen heath without lichens 2cx Lichen heath with lichens 2e Dwarf shrub heath	T3-C2 Lime-poor mountain heathlands T3-C3 Lime-poor mountain lichen heathlands T3-C4 Intermediate lee side
Wetlands	9a Bog 9c Fen 9d Mud-bottom fen and bog	V1-C1 Very lime-poor mire V1-C5 Very lime-poor mire edge V1-C6 Lime-poor mire edge

Table 3 Confusion matrix for the most frequent NIBIO units in the mapped area. The confusion is rated on a scale from 0 to 12, where 12 is the maximum level of confusion for each pair of units. Where the classification confusion changes after extracting a buffer around all delineations, the new confusion score is given in brackets. Vegetation groups are shown in greyscale, and confusion across groups is indicated by hatching.

		Mountain heath			Forest			Wetland		
		2c	**2cx**	**2e**	**4b**	**7b**	**7c**	**9a**	**9c**	**9d**
Mountain heath	**2c**	-	-	-	-	-	-	-	-	-
	2cx	5 (4)	-	-	-	-	-	-	-	-
	2e	1	8 (7)	-	-	-	-	-	-	-
Forest	**4b**	0	0	0	-	-	-	-	-	-
	7b	0	0	0	4 (2)	-	-	-	-	-
	7c	0	0	0	0	7	-	-	-	-
Wetland	**9a**	0	0	4 (3)	0	3	0	-	-	-
	9c	0	0	5 (2)	1 (0)	0	0	6	-	-
	9d	0	0	3 (1)	1 (0)	0	0	8 (5)	3	-

Table 4 Confusion matrix for the most frequent NiN units in the mapped area. The confusion is rated on a scale from 0 to 12, where 12 is the maximum level of confusion for each pair of units. Where the classification confusion changes after extracting a buffer around all delineations, the new confusion score is given in brackets. Nature groups are shown in greyscale, and confusion across groups is indicated by hatching.

		Mountain heath			Forest			Wetland		
		T3-C2	**T3-C3**	**T3-C4**	**T4-C1**	**T4-C2**	**T4-C5**	**V1-C1**	**V1-C5**	**V1-C6**
Mountain heath	**T3-C2**	-	-	-	-	-	-	-	-	-
	T3-C3	11 (4)	-	-	-	-	-	-	-	-
	T3-C4	5	0	-	-	-	-	-	-	-
Forest	**T4-C1**	0	0	0	-	-	-	-	-	-
	T4-C2	1 (0)	0	2	6	-	-	-	-	-
	T4-C5	3 (2)	0	0	2	5 (4)	-	-	-	-
Wetland	**V1-C1**	1	0	1 (0)	0	2	0	-	-	-
	V1-C5	3 (1)	0	0	0	0	0	4 (3)	-	-
	V1-C6	1	0	2 (0)	0	0	0	1	5	-

References

Cherrill, A., & McClean, C. (1999). The reliability of 'Phase 1' habitat mapping in the UK: the extent and types of observer bias. *Landscape and Urban Planning, 45*(2–3), 131-143.