<u>Denbigh Quarry – GCN HSI Calculations</u>

Pond 1

Habitat Suitability Index	Factor	Value	Rating for Index
HS1	Geographic Location	0.50	Below Average
HS3	Drying out frequency	0.90	Excellent
HS4	Water Quality	0.33	Poor
HS5	Shade	1.00	Excellent
HS6	Fowl	0.67	Average
HS7	Fish	0.67	Average
HS8	Pond Count	0.90	Excellent
HS9	Terrestrial habitat	0.33	Poor
HS10	Macrophytes	0.30	Poor
Overall HSI Value		0.57	Below Average

Pond 2

Habitat Suitability			
Index	Factor	Value	Rating for Index
HS1	Geographic Location	0.50	Below Average
HS2	Pond Area	0.40	Poor
HS3	Drying out frequency	1.00	Excellent
HS4	Water Quality	0.33	Poor
HS5	Shade	1.00	Excellent
HS6	Fowl	1.00	Excellent
HS7	Fish	1.00	Excellent
HS8	Pond Count	0.70	Good
HS9	Terrestrial habitat	0.33	Poor
HS10	Macrophytes	0.30	Poor
Overall HSI Value		0.58	Below Average

Pond 3

Habitat Suitability Index	Factor	Value	Rating for Index
HS1	Geographic Location	0.50	Below Average
HS2	Pond Area	0.90	Excellent
HS3	Drying out frequency	1.00	Excellent
HS4	Water Quality	0.67	Average
HS5	Shade	1.00	Excellent
HS6	Fowl	0.67	Average
HS7	Fish	1.00	Excellent
HS8	Pond Count	0.65	Average
HS9	Terrestrial habitat	0.33	Poor
HS10	Macrophytes	1.00	Excellent
Overall HSI Value		0.73	Good

Pond 4

Habitat Suitability Index	Factor	Value	Rating for Index
HS1	Geographic Location	0.50	Below Average
HS2	Pond Area	0.90	Excellent
HS3	Drying out frequency	1.00	Excellent
HS4	Water Quality	0.67	Average
HS5	Shade	1.00	Excellent
HS6	Fowl	0.67	Average
HS7	Fish	1.00	Excellent
HS8	Pond Count	0.65	Average
HS9	Terrestrial habitat	0.33	Poor
HS10	Macrophytes	0.60	Average
Overall HSI Value		0.69	Average

Pond 5

Habitat Suitability Index	Factor	Value	Rating for Index
HS1	Geographic Location	0.50	Below Average
HS2	Pond Area	0.70	Good
HS3	Drying out frequency	0.10	Poor
HS4	Water Quality	0.33	Poor
HS5	Shade	1.00	Excellent
HS6	Fowl	1.00	Excellent
HS7	Fish	1.00	Excellent
HS8	Pond Count	0.70	Good
HS9	Terrestrial habitat	0.33	Poor
HS10	Macrophytes	0.50	Below Average
Overall HSI Value		0.52	Below Average