

# BYSTOCK DWT RESERVE

## 2017-2026: Confirmed Priority Site of National Importance

Heathland pools, mire and a small reservoir with successful breeding populations of Small Red Damselfly, Hairy Dragonfly and Downy Emerald. Presence of Red-eyed Damselfly and Scarce Chaser; former presence of White-legged damselfly and Ruddy Darter.

Last updated: 28/03/2025

Site: BYSTOCK DWT RESERVE	1987-1996			1997-2006			2007-2016			2017-2026		
Grid ref.: SY033843	Breeding		Other	Breeding		Other	Breeding		Other	Breeding		Other
	Succ	Poss		Succ	Poss		Succ	Poss		Succ	Poss	
<b><u>Damselflies</u></b>												
Beautiful Demoiselle			C			B	B		C			C
Banded Demoiselle												
Emerald Damselfly				A		A			B			A
<b><u>White-legged Damselfly</u></b>			<b>A</b>									
Large Red Damselfly	C	D	E	D	D	E	C	D	D	C	D	D
Blue-tailed Damselfly		C	D	A	B	D		+	C			B
<b><u>Scarce Blue-t Damselfly</u></b>												
Common Blue Damselfly			D	D	D	E			D	A	B	D
<b><u>Southern Damselfly</u></b>												
Azure Damselfly	B	D	E	D	D	E	B	B	D	C	B	E
<b><u>Red-eyed Damselfly</u></b>												<b>B</b>
Small Red-eyed Damselfly												
<b><u>Small Red Damselfly</u></b>	<b>C</b>	<b>B</b>	<b>E</b>	<b>C</b>	<b>C</b>	<b>D</b>		<b>A</b>	<b>D</b>	<b>B</b>	<b>B</b>	<b>D</b>
<b><u>Dragonflies</u></b>												
<b><u>Hairy Dragonfly</u></b>				<b>A</b>		<b>C</b>	<b>A</b>	<b>A</b>	<b>C</b>			<b>B</b>
Common Hawker												
<b><u>Norfolk Hawker</u></b>												
Brown Hawker												
Southern Hawker			B	A		C	A	A	C	A		C
Migrant Hawker						C			C			B
Emperor Dragonfly		A	B	B	+	D	A		C	A		C
Lesser Emperor												
Vagrant Emperor												
Golden-ringed Dragonfly			C	A		C		A	C			B
<b><u>Downy Emerald</u></b>	<b>A</b>		<b>B</b>	<b>B</b>		<b>D</b>	<b>C</b>	<b>B</b>	<b>C</b>	<b>B</b>		<b>B</b>
Broad-bodied Chaser			B			A			C			B
<b><u>Scarce Chaser</u></b>												<b>A</b>
Four-spotted Chaser			A	A		C	B	A	C	A		C
Keeled Skimmer			B	B	B	D	A	C	D	A	B	D
Black-tailed Skimmer							A		C	B	B	C
Common Darter			B	B	A	D		B	E		C	D
Red-veined Darter												A
<b><u>Ruddy Darter</u></b>						<b>A</b>						
Black Darter												
Yellow-winged Darter												
Scarlet Darter												
<b>Total species in category:</b>	4	5	15	14	8	18	9	12	18	10	7	21

**Bold underlined = nationally important species** **Bold black = important species**

Succ = Successful breeding (exuvia(e) and/or larva(e) and/or pre-flight emergent and/or oviposition);

Poss = Possible breeding (copulating pair); Other = Adult(s) or unspecified.

Abundance codes: A=1; B=2-5; C=6-20; D=21-100; E=101-500; F=>500; + = no count.

### **Priority Species History**

**White-legged Damselfly** – 1 on 3/7/94.

**Red-eyed Damselfly** – B (2-5) on 28/5/23, the first record for the site.

**Small Red Damselfly** – occurs at two small heathland pools: recorded in 1977, 1981, 1985 and 1987; then a dramatic increase followed tree and scrub clearance by DWT around ponds in late 1980's: 15 adults on 5/7/91; ca. 50 adults (only two females) on 5/7/92; 110 adults around about half the ponds' margins on 3/7/94; at least 60 (42 males and five pairs *in cop.*) on 1/7/95. Maxima of D (21-100) recorded in 2000, 2002, 2005, 2006, 2007, 2009-12, 2014 and 2016-17.

**Hairy Dragonfly** – singles were seen on 29/5 and 16/7/00; 3 (one egg-laying) on 10/6/01; singles on 12/6/04 and during 29/5-22/6/05 (with 1 egg-laying on the first date); and B (2-5) on 3/6 and 18/6/06; a report of 15 on 17/06/2006 is unconfirmed; maximum of C (6-20) on 19/5/07, with singles egg-laying on 5/5/07, 5/6/07 and 23-24/5/08.

**Downy Emerald** – occurs around the small reservoir: first recorded in 1978; territorial males regular in recent years, including at least 3 on 5/7/92 and report of 'about 30' in 1994; in 1995, a maximum of 2 on 1/7/95. Singles were seen in 2000-1 and small numbers (A-B) during 2004-2007, except for C (6-20) on 5/6/07 and 8/6/08 and an unconfirmed report of 50 on 17/06/06; 2 exuviae were found on 14/5/06 and 1 on a boardwalk strut on 30/5/08. Up to C (6-20) adults regular since, with C exuviae in 2010 and egg-laying in 2008, 2011 and 2013.

**Scarce Chaser** – an immature in the meadow on 3/6/23.

**Ruddy Darter** – 1 on 23 and 25/7/06 is assumed to have been a migrant.

### **Other species of note**

**Black Darter** – reported on 21/7/77.

**Red-veined Darter** – 1 on 6/7/19.

### **Habitat**

A small reservoir (Downy Emerald area) with several islands. It has clear deep water with some areas of water lily and other floating and submerged vegetation. pH 7.1 (12/8/95). Conductivity 210  $\mu\text{S/cm}$ . (6/6/95). There is some emergent vegetation around the banks. Both the islands and the surrounding land have pines and broad-leaved trees growing. The wet heath and mire (pH 6.4 on 12/8/95; conductivity 160  $\mu\text{S/cm}$ . on 6/6/95) to the north-west has been progressively cleared of birch and willow scrub since the late 1980's and was pony-grazed in 2005. This area includes two small, narrow pools holding Small Red Damselfly: they are 1-2 m deep and 2-3 m wide with steep sides overhung by massive *Molinia caerulea* tussocks. A scum formed over the surface during the summer of 1995. pH 5.4-6.3 (5/7/91); 6.0-6.2 (5/7/92); 5.4-5.7 (12/8/95). Conductivity 180  $\mu\text{S/cm}$  (6/6/95). The stream ('2' on the map) feeding the reservoir from the north had pH 6.6-6.7 (12/8/95) and conductivity 170-180  $\mu\text{S/cm}$ . (6/6/95).

### **Status**

SSSI; DWT Reserve.

### **Area**

ca. 7.0 ha

**Local Authority:** East Devon DC

### **Owner/tenant**

Owned by South West Water/South West Lakes Trust, leased by DWT.

### **Threats**

- Natural succession (scrub encroachment).
- Accidental fire.

### **Management suggestions**

- The reservoir, ponds and wet heathland are managed by DWT with the key dragonfly species in mind: nothing can be suggested in addition to those works required by the management plan.

# Bystock Reserve: 1995 survey map

