
1855 8 2

1968

Science

Gr
<The Tragedy of Commons>

Garret Hardin

[1]

[2]

[3]

[4]

[5]

[6]

[7]

[8]

[9]

[10]

[11]

1822

[1][2]	6			124	90	
[3]		149		3925		
[4]	9		9			
[5][9][11]	v		1976	335-367	335-367	335-367
[6]	v					
[7]	1			1985	86	
[8]	126			1998	2555	
[10]	46		1986	560		

[1]

1832

[2]

[3]

[4]

10

46

5

[5]

[6]

[7]

[8]

[9]

[1]

2

2007

[2]

1985

22

[3]

v

1965

, 88

[4]

154

1985

[5]

[6]

232

1985

[7]

[8]

8

1985

[9]

310

1977

[1]

[2]

[3]

[4]

[5]

[6]

[7]

[8]

[1]		969		1985			
[2][8]	v		335- 367	335- 367			
[3]							
[4]			160	4176			
[5]				6	1937	242	
[6]			62		1936	1372	
[7]		38		1985			

[1]

[2]

[3]

[4]

[1]

! [2]

[3]

[4]

[5]

[1]

[2]

[3]

[4]

[5]

v

175

335-367

1985

4

1988

2010

1990

1990

1990

522

68

4