

Contents

<i>Preface</i>	vii	
1	Introduction	1
2	The basic model	10
	A The Hawk–Dove game	11
	B A review of the assumptions	20
	C An extended model – playing the field	23
3	The war of attrition	28
4	Games with genetic models	40
	A The two-strategy game with diploid inheritance	40
	B Phenotypes concerned with sexual reproduction	43
	C The evolution of anisogamy	47
5	Learning the ESS	54
6	Mixed strategies – I. A classification of mechanisms	68
7	Mixed strategies – II. Examples	81
	A The sex ratio	81
	B Status in flocks	82
	C Dimorphic males	86
	D Ideal free distributions	90
	E Dispersal in a uniform environment	92
8	Asymmetric games – I. Ownership	94
9	Asymmetric games – II. A classification, and some illustrative examples	106
10	Asymmetric games – III. Sex and generation games	123
	A Some theoretical considerations	123
	B Parental care	126
	C Games with cyclical dynamics	130

D	Sexual selection	131
E	Games with alternate moves	137
11	Life history strategies and the size game	140
12	Honesty, bargaining and commitment	147
A	Information transfer in animal contests	148
B	Bluff as a transitory phenomenon	151
C	Bargaining, territory and trading	151
D	Commitment	161
13	The evolution of cooperation	167
14	Postscript	174
Appendices		
A	Matrix notation for game theory	180
B	A game with two pure strategies always has an ESS	180
C	The Bishop–Cannings theorem	182
D	Dynamics and stability	183
E	Retaliation	188
F	Games between relatives	191
G	The war of attrition with random rewards	194
H	The ESS when the strategy set is defined by one or more continuous variables	197
I	To find the ESS from a set of recurrence relations	198
J	Asymmetric games with cyclic dynamics	199
K	The reiterated Prisoner’s Dilemma	202
<i>Explanation of main terms</i>		
<i>References</i>		
<i>Subject index</i>		
<i>Author index</i>		