1   **APPENDIX B: Effect of changing the parameter values**

2

3   Figure B1. The effect of resource value

4   (v) on the switchpoint between non-

5   aggressive ($P_H < 0.5$) and aggressive

6   ($P_H \geq 0.5$) behaviour under the ESS.

7   For each value of v, aggression is

8   greater above the dividing line (darker

9   region) than below it (lighter region).

10   Other parameter values: $c = 1.0$, $\gamma =$

11   0.1, $p_0 = p_1 = 0.5$, $d = 0.1$, $F = 30$, $\varepsilon =$

12   0.005.

13

14   Figure B2. The effect of mortality rate

15   (d) on the switchpoint between non-

16   aggressive ($P_H < 0.5$) and aggressive

17   ($P_H \geq 0.5$) behaviour under the ESS.

18   For each value of d, aggression is

19   greater above the dividing line (darker

20   region) than below it (lighter region).

21   Other parameter values: $v = 1.0$, $c =$

22   1.0, $\gamma = 0.1$, $p_0 = p_1 = 0.5$, $F = 30$, $\varepsilon =$

23   0.005.
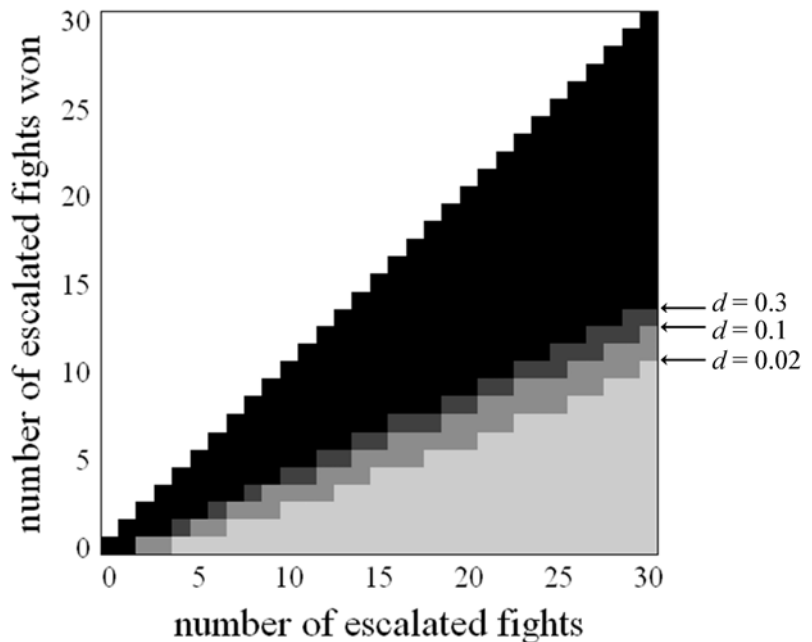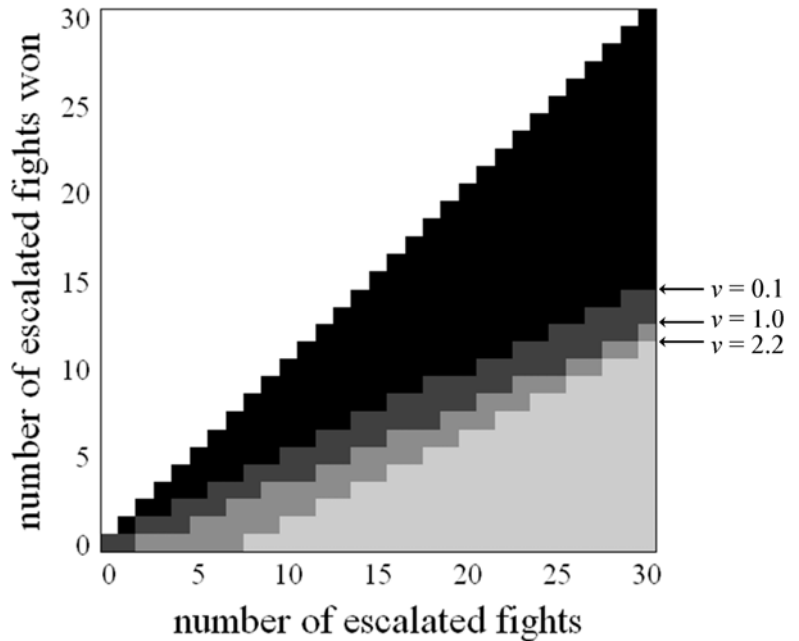
24

25   Figure B3. The effect of the chance

26   that a weaker individual defeats a

27   stronger individual in a fight (γ) on the

28   switchpoint between non-aggressive

29   ($P_H < 0.5$) and aggressive ($P_H \geq 0.5$)

30   behaviour under the ESS. For each

31   value of γ, aggression is greater above

32   the dividing line (darker region) than

33   below it (lighter region). Other

34   parameter values: $v = 1.0$, $c = 1.0$, $p_0 =$

35   $p_1 = 0.5$, $d = 0.1$, $F = 30$, $\varepsilon = 0.005$.

36

37   Figure B4. The effect of the proportion

38   of strong individuals (p_1) on the

39   switchpoint between non-aggressive

40   ($P_H < 0.5$) and aggressive ($P_H \geq 0.5$)

41   behaviour under the ESS. For each

42   value of p_1, aggression is greater above

43   the dividing line (darker region) than

44   below it (lighter region). Other

45   parameter values: $v = 1.0$, $c = 1.0$, $\gamma =$

46   0.1, $d = 0.1$, $F = 30$, $\varepsilon = 0.005$.