Contents

Part I The Life Table

1	"Tables of Annuity Values Which Were Sanctioned by the Roman Law for the Purposes of the Lex Falcidia", C. F. Trenerry (1926)	7
2	"Natural and Political Observations Mentioned in a Following Index, and Made Upon the Bills of Mortality", John Graunt (1964 (1662))	11
3	"An Estimate of the Degrees of the Mortality of Mankind", Edmund Halley (1693)	21
4	"A Treatise on the Valuation of Annuities and Assurances on Lives and Survivors", Joshua Milne (1815)	27
5	"Statistical Applications of the Mortality Table", George King (1902)	35
6	"Formal Treatment of Aggregate Mortality Data", Wilhelm Lexis (1875)	39
7	"A Short Method for Constructing an Abridged Life Table", Lowell J. Reed and Margaret Merrell (1939)	43
8	"Short methods of Constructing Abridged Life Tables", T. N. E. Greville (1943)	53
9	"Life Tables for Natural Populations of Animals", Edward S. Deevey, Jr. (1947)	61

Part II Stable Population Theory

10	"An Illustration of Population Growth", Johann Peter Süssmilch (1761)	79
11	"A General Investigation into the Mortality and Multiplication of the Human Species", Leonard Euler (1970 (1760))	83
12	"Relation Between Birth Rates and Death Rates", Alfred J. Lotka (1907)	93
13	"A Problem in Age-Distribution", F. R. Sharpe and Alfred J. Lotka (1911)	97
14	"The Stability of the Normal Age Distribution", Alfred J. Lotka (1922)	101
15	"Resolving a Historical Confusion in Population Analysis", Paul A. Samuelson (1976)	109
16	"On the Integral Equation of Renewal Theory", William Feller (1941)	131
17	"A New Method for Calculating Lotka's r — The Intrinsic Rate of Growth in a Stable Population", Ansley J. Coale (1957)	157
18	"The Fundamental Theorem of Natural Selection", R. A. Fisher (1958 (1930))	161
19	"How the Age Distribution of a Human Population is Determined", Ansley J. Coale (1957)	167
20	"On the Reproduction of Organisms with Overlapping Generations", W. R. Thompson (1931)	173
21	"The Population Consequences of Life History Phenomena", Lamont C. Cole (1954)	183
Par	et III Attempts at Prediction and the Theory They Stimulated	
22	"The Probability of a Cessation of the Growth of Population in England and Wales during the Next Century", Edwin Cannan (1895)	197
23	"Population Waves", Harro Bernardelli (1941)	207
24	"On the Use of Matrices in Certain Population Mathematics", P. H. Leslie (1945)	213

Part IV 🛛 I	Parameterization	and Curve	Fitting
-------------	------------------	-----------	---------

25	Human Mortality", Benjamin Gompertz (1825)	231
26	"On the Law of Mortality", William M. Makeham (1867)	235
27	"Calculation of Model Tables", Ansley J. Coale and Paul Demeny (1966)	241
28	"Methods of Analysis and Estimation", William Brass and Ansley J. Coale (1968)	253
29	"Nuptiality, Fertility, and Reproductivity", S. D. Wicksell (1931)	261
30	"Model Fertility Tables: Variations in the Age Structure of Childbearing in Human Populations", Ansley J. Coale and T. James Trussell (1974)	269
31	"A Note on the Law of Population Growth", Pierre-François Verhulst (1838)	279
32	"On the Rate of Growth of the Population of the United States since 1790 and its Mathematical Representation, Raymond Pearl and Lowell J. Reed (1920)	287
Par	rt V Probability Models of Conception and Birth	
33	"First Investigations on the Fecundability of a Woman", Corrado Gini (1924)	299
34	"Theoretical Basis of Measures of Natural Fertility", Louis Henry (1972 (1953))	305
35	"On the Time Required for Conception", Mindel C. Sheps (1964)	315
36	Bibliography	325
Ado	ditional Bibliographic References	331
Ind	lex	333