

4789. WILSON, WILLIAM P., et al. "Arousal from Sleep of Male Homosexuals," **Biological Psychiatry**, 6 (1973), 81-84.

Homosexual males differed from normal males in being significantly more arousable in Stage 3 and 4 of the sleep cycle, as are normal females.

B. SOCIOBIOLOGY

Through the publications of Edwin O. Wilson and his colleagues at Harvard, sociobiology became a much-discussed topic in the 1970s. Most of the controversy revolves around human behavior, since it is generally conceded that the sociobiological approach has proved valuable in some animal studies. With regard to human homosexuality, sociobiology purports to solve the riddle of how this behavior pattern can accord with the evolutionary theory of sexual selection focusing on procreation by proposing models of "inclusive fitness" in which homosexual behavior is genetically functional.

4790. FUTUYMA, DOUGLAS J., and STEPHEN J. RISCH. "Sexual Orientation, Sociobiology, and Evolution," **JH**, 9:2-3 (1983-84), 157-68.

Concludes that there is no reliable evidence that homosexual and heterosexual orientations are caused by genetic differences. Evolutionary theory provides no guide to morality or ethical progress, nor for appropriate social attitudes toward homosexuality.

4791. GENGLE, DEAN, and NORMAN D. MURPHY. "Why We Are Gay: Revolutionary Extinction? An Evolutionary Model of the Origin of Sexualities," **Advocate**, no. 253 (November 1, 1978), 15-21.

Speculative theoretical model of the psychobiological components of gender, gender identity, and sexual orientation.

4792. KIRSCH, JOHN, and JAMES RODMAN. "The Natural History of Homosexuality," **Yale Scientific Magazine**, 51:3 (1977), 7-13.

Concise statement of the case for the sociobiological approach.

4793. MILLER, ALAN V. **The Genetic Imperative: Fact and Fantasy in Sociobiology: A Bibliography**. Toronto: Canadian Gay Archives, 1979. 107 pp. (CGA Publications, 2)

In this useful roster, presenting both pro and con publications, see esp. "Gays," pp. 82-83. For representative papers on general questions posed by the emergence of this controversial discipline in the 1970s, see Arthur L.

Caplan (ed.), **The Sociobiology Debate: Readings on Ethical and Scientific Issues.** (New York: Harper and Row, 1978; 514 pp.).

4794. RUSE, MICHAEL. **Is Science Sexist? And Other Problems of Biological Science.** Boston: D. Reidel, 1981. 299 pp.

Rebuttal of some current critiques of the biological theory of evolution (neo-Darwinism). See esp. Chapter 10, "Are Homosexuals Sick?" (pp. 245-72). See also his: **Sociobiology: Sense or Nonsense?** (Boston: D. Reidel, 1979; 231 pp.).

4795. SYMONDS, DONALD. **The Evolution of Human Society.** New York: Oxford University Press, 1979. 358 pp.

Primatologist's presentation situating the emergence of the difference between men and women in the long hunting--and-gathering stage of human evolution. See Chapter 9, "Test Cases: Hormones and Homosexuals" (pp. 286-305).

4796. TRIVERS, ROBERT L. "The Evolution of Reciprocal Altruism," **Quarterly Review of Biology**, 46 (1971), 35-57.

Influential study by a Harvard ornithologist and sociobiologist, setting forth a general theory which has been used to explain the "inclusive fitness" of homosexuality.

4797. WEINRICH, JAMES D. **Human Reproductive Strategy: I. Environmental Predictability and Reproductive Strategy; Effects of Social Class and Race. II. Homosexuality and Non-Reproduction; Some Evolutionary Models.** Cambridge, MA: Harvard University, 1976. 231 pp. (unpublished Ph.D. dissertation--biology)

Part 1 mainly concerns heterosexual behavior. Part 2 is a theoretical exposition of the ways in which certain post-Darwinian evolutionary models--esp. Hamilton's kin selection--can be used to understand homosexuality, transvestism, and transsexualism.

4798. WILSON, EDWARD O. **On Human Nature.** Cambridge, MA: Harvard University Press, 1978. 260 pp.

Presentation of sociobiology for the lay reader by the Harvard entomologist who is its best known proponent. See pp. 142-47 for his argument in favor of "a strong possibility that homosexuality is normal in a biological sense."

C. TWIN STUDIES

Twins have for some time interested researchers as an opportunity for testing the inherited nature of specific traits--among them homosexual behavior. To be valid,