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**COVER:** Ankylosaur hitting tyrannosaur with its tail. Robert Bakker's lively reconstruction of dinosaur activity. Paleontologists are debating whether the extinct animals depended on their environment for body heat or whether, like mammals, they generated heat internally. See p. 218. (Drawing: National Museums of Canada)

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# LETTERS

## Disciplining without anger

The exchanges on counseling and parenting in recent issues hit me "close to home." I'm a ninth generation Yankee who is solidly "sold" on our old axiom "spare the rod and spoil the child." What makes all the difference in the world is how the rod is used! My father alienated me as a child by whipping me *in anger!* When my children were outright disobedient, my wife and I held "trials" in which the infraction was clearly discussed, the reason for the violated rule clearly explained, and the penalty discussed and *agreed to by the child* before it was carried out. Once, after the agreed-on number of smart spansks had been delivered with the paddle, my son (about 6) crept into my lap, hugged and kissed me and said, "Daddy, I guess I've learned my lesson." When reason and fairness, without anger, are used in disciplining a child, there is no resentment, alienation and delinquency. Not only have I proved my forebears right in my own experience, but I am persuaded that the modern scourge of delinquency and rebellion among children is the direct result of Ralph Welsh's bankrupt philosophy that "the acceptance of corporal punishment in both the home and school should no longer occur . . ."

Children are born small animals, without mature reasoning power. The physical *safety* of a child who does not comprehend the reason for a command can often only be assured by a spank, slap, or push. Does Dr. Welsh suggest that lion tamers use counseling rather than whips? Or that horsewhips be abolished in favor of pretty pleadings with the horse to conform to the driver's desires? Sociological theories like Dr. Welsh's are what are ruining our whole society and way of life, rather than improving them. My three fine sons are living proof of this statement.

William B. Elmer  
Andover, Mass.

## At what price birth control?

The article on sperm inhibitors as contraceptives (SN: 3/11/78, p. 150) leads me to believe that attitudes detrimental to the health and safety of the female population of the world continue to prevail among researchers into contraception.

The first paragraph of the article cites oral contraceptives and intrauterine devices as "undoubtedly the best available birth control methods, short of sterilization" in spite of the fact that "they have been linked to an increasing number of complications." How can contraceptives that are linked to such dangerous complications as "high blood pressure, strokes, heavy

menstrual flow and (get this!) pain" be touted as the best available methods? Particularly when the use of condoms in combination with spermicidal foam achieves up to 98 percent effectiveness, with rare skin irritation as the only apparent side effect? How again, when the proper and informed use of the diaphragm achieves better than 90 percent effectiveness?

I am pleased, of course, that researchers are finally exploring male birth control methods and that progress is being made. In the meantime, it seems to me of vital importance that scientists and the public not be fooled by expediency into sacrificing the health and safety of women and their offspring.

Molly Gordon  
Bainbridge Island, Wash.

## Biorhythms vs. mathematics

I read with interest the report on biorhythms and highway crashes (SN: 2/25/78, p. 118). A simple mathematical argument can also be used to show that biorhythm cycles are not likely to modify human behavior.

The biorhythm calculation assumes the existence of several cycles of fixed period. If the 28-day emotional cycle varied from exactly 23.0 days by 0.2 percent, the cycle would be out of phase by half a cycle in 20 years, compared to the position of the cycle computed by the usual method.

If the biorhythm method is correct, the period of each of the cycles must be constant to much better than 0.2 percent, averaged over the life of the individual, and must have the same value for every member of the population. I know of no physiological parameter that is so constant across the entire population, nor of any which is so invariable in time during the life of an individual.

This is not to deny the important and interesting scientific work now being done on human and animal biological rhythms.

Stuart Wier  
Boulder, Colo.

## An acre of shrimp

In the article on the controlled environment production of shrimp (SN: 2/4/78, p. 76), the statement is made that the optimum production would be "2,000 to 3,000 pounds of whole animal per acre of water surface per year." In the same paragraph it speaks of production of 3 and 4 kilograms of animal per square meter. If the metric values are correct (as seems likely to me), I believe the first figures should have been 20,000 to 30,000 pounds per acre per year.

Roland Rainge  
New Salisbury, Ind.

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