

The following editorial from the British Veterinary Journal of February, 1959, is reprinted with the kind permission of the editors.

**ANIMALS AND CHILDREN**

Men and the domesticated mammals are built according to the same basic design. In spite of this there are great differences in form and function for, during the process of time, modifications have been made in order to fit the various animals to their environment, sentient reactions, and mode of life. Speaking in broad biological terms probably the greatest matter of difference between these animals and man is centered in the nervous system for homo sapiens is blest, there are some who say he is cursed, with the qualities of thought and reason and speech. All the animals are sentient to a great degree. They can experience fear, flush with anger and be imbued with greed, jealousy and covetousness, and these things may so upset the even balance of their lives that their emotional reactions are manifested in acts of physical strife and even cruelty. Under other circumstances emotional response can be expressed in the tender attributes of solicitude and kindness, or it may lead to the exhibition of the qualities of courage and endurance. Since the very dawn of civilization, which was conceived when man acquired fortuitously the power to think and reason and the ability to express his thoughts in coherent speech, it has been recognised, but not always implemented, that the path to a higher state depended upon the control and elimination of evil things and the enhancement of those which were of good intent.

Some men are born to be kind and gentle, others can be trained or directed on to the right path and there are some who will fail to respond to any approach. There is evidence to show that the average man is more gentle in nature and kinder in spirit than his ancestors were. Acts of cruelty which gave cause for the expression of horror and consternation in 1959 would have occasioned little or no comment a hundred years ago. On the surface it would seem that this mellowing of the spirit has been actuated by the advancement of the standard of general education and the spread of civilisation. Such a premise is not correct by any means. Acts of cruelty are not perpetrated always by those from the ranks of the vulgar untutored mob. The training of the mind and the accumulation of knowledge does not necessarily imply that the culture and enhancement of the things, of the heart or spirit advance in due proportion. The reverse may occur. An excited and enthusiastic searcher for factual information can become so obsessed with his task that he may ignore or sweep aside all those things which halt or impede the progress to his ultimate goal. These can include any thought for the welfare of his fellows and especially those things which stem from spirit or sentiment.

The ideal state would be one in which the advancement of knowledge in the philosophical and scientific

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**PAINFUL POISON DECIMATING WILDLIFE**

Everyone who is interested in protecting wildlife should read the article on poison-spreading in the January issue of Nature Magazine, "Uncontrollable 'Control'" by Marguerite Angelo Smelser. Reprints of this article are available free on request from the Animal Welfare Institute.

The article deals with only one type of poison, but its message applies clearly to poison programs generally. "Such is the current passion for poison," the author begins, "that yearly, upon millions of American acres, Federal and State agencies are spreading tons of grain and meat impregnated with the most spectacularly deadly poison known to man: Sodium fluoroacetate. Commonly called Compound 1080, this all-killing poison was developed by chemists during the second world war when red squill was hard to get. So extremely toxic is 1080 that minute amounts kill, and it possesses an annihilative chain action destructive to all wildlife. 'Unfortunate that 1080 was ever discovered,' writes a noted research biologist."

The fully documented information which follows tells a shocking story of mass destruction of all types of wildlife by this agonizing poison: geese, coyotes, deer and small animals, not to mention the domestic animals and humans who have also succumbed. The astonishing lengths to which the official poisoners go to conceal the effects of their programs are detailed concisely, a great variety of

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**CONGRESSMAN BARING MOVES TO OUTLAW MOTORIZED PURSUIT OF WILD HORSES**

Cruel persecution of the last remaining mustangs of the West will be prevented by enactment of H.R. 2725, introduced in the United States House of Representatives by the Hon. Walter S. Baring of Nevada. The bill would prohibit the use of aircraft or motor vehicles to hunt wild horses or burros on land belonging to the United States. It was introduced January 19th, and a report from the Department of the Interior is awaited. The bill is pending before the House Judiciary Committee.

During the past eight years, it is estimated that 100,000 wild horses have been killed with extreme brutality in Nevada alone. There are only about 20,000 mustangs left in the entire West, according to the Department of the Interior. Through the efforts of Mrs. Velma Johnston of Wadsworth, Nevada, a state law protecting the horses was passed in 1955 in Nevada, but since 80% of Nevada's land is owned by the federal government, national legislation is essential to protect the horses there and also in other Western States.

Mrs. Johnston writes of the capture of the horses: "The methods employed are cruel beyond belief. Driven at

break-neck speed by airplane from their meager shelter in the barren hills onto the flat lands, the horses are pursued by trucks and lassoed with short ropes with a tire attached to the end. The terrified animals drag the tire till they are exhausted, then are loaded onto trucks and hauled to distant rendering works and slaughtered and processed. That they are ambulatory is all that can be said about their condition. Mercilessly pursued, brutally handled and heartlessly confined, they are a sorry spectacle indeed, and the fact that this practice has been allowed to continue is a reproach to our so-called civilization and to everyone who has turned his eyes the other way."

Mrs. Johnston details other abuses as follows: "To make the horses run from their shelters into the open when planing them, it is necessary to shoot them, not where they will die from the wound but where they will be encouraged to keep on the run. Few arrive at the canneries unwounded by gunshot. . . It is not uncommon to abandon crippled horses and young colts whose mothers have been captured. The colts have little chance of survival in the area in which they have been abandoned, nor is it often that some one comes along to end the misery of an injured horse."

It is doubtful that many owners of pet dogs would care to offer them food which is obtained in so ghastly a manner, but despite national publicity, the majority are unaware of this cruelty or the reason for its existence. A well-informed source explains: "There is a growing tendency among many of the modern school of sheep and cattle operators, to claim for themselves the monopolistic use of the public land to the exclusion of every living thing not commercially classified or economically profitable to private interest, and since the hunting of the horses to provide meat for the pet food canneries has been such an expedient means of range clearance, neither the users of the range nor the management officials responsible for them are likely willingly to relinquish this well-proved method of clearance."

It is to be hoped that since the numbers of remaining horses have dwindled so greatly, the commercial interests involved will not insist on draining the last drop of profit from them but will refrain from opposing this morally unchallengeable anti-cruelty bill.

## THE WILDERNESS BILL

A bill to provide for an effective national wilderness preservation system was re-introduced in the United States Senate on February 19, 1959 by Senator Hubert H. Humphrey and sixteen co-sponsors: Senators Neuberger of Oregon, Byrd of West Virginia, Clark of Pennsylvania, Douglas of Illinois, Langer of North Dakota, Mundt of South Dakota, Lausche of Ohio, Mansfield of Montana, Martin of Iowa, Morse of Oregon, Murray of Montana, Proxmire of Wisconsin, Randolph of West Virginia, Smith of Maine, Wiley of Wisconsin and Williams of New Jersey. Seven companion bills have been introduced in the House of Representatives by Representatives Baldwin and Miller of California, O'Hara of Illinois, Reuss of Wisconsin, Metcalf of Montana, Saylor of Pennsylvania and McGovern of South Dakota.

This vital conservation measure failed to come to a vote last year, because opponents, observing the strong

public support it had aroused, demanded the regional hearings which they had previously opposed, thus preventing action on the bill in the 85th Congress. Reports indicate that these hearings, held early in November in Bend, Oregon, San Francisco, California, Salt Lake City, Utah and Albuquerque, New Mexico, have further strengthened support for the measure.

The San Francisco Chronicle said editorially on November 12, 1958: "The best argument for the wilderness preservation bill which a Senate Interior subcommittee had under hearing in San Francisco this week is found in the latest word from the Census Bureau. It predicts that in the next 21 years this country may grow by almost 100 million in population. A prospect like that should wake up the public at large to the fight which conservation groups are making for a truly effective wilderness preserve. They urge the enactment of a National Wilderness Preservation Act to protect that two per cent of the nation's land area, some 50 million acres where roads still don't exist and the environment is unchanged by man.

"If Congress does not legislate wisely and soon to bar the gates against exploiters of these regions, many of them are certain to be overrun as the population swells to the estimated figure of 272 millions by 1980. Once lost, a wilderness is lost forever. . . ."

The San Francisco News of November 13th, expressing the hope that the bill would pass, said: "Even the City lover who has no intention of trudging off into the wilds is comforted to know that such unscarred majesty remains. Future generations will not be thankful if this generation permits all of the 'original America' to be swallowed by ravenous progress."

Senator Humphrey, who was awarded the 1958 Schweitzer Medal of the Animal Welfare Institute for his leadership on the humane slaughter bill, pointed out when he introduced the Wilderness Bill, "We are indeed fortunate that we still have these remnants of wilderness to preserve. We are fortunate that we have developed a program for their protection and preservation while there is yet a good opportunity to see it adopted without disruption of other interests. Critics and even friends may chide us for our eagerness and anxiety and say there is no real or pressing need for such legislation now. Yet we can see all about us the mounting pressures. We can recognize that all our lands are destined to be put to some human use, that no areas of wilderness can be expected to remain as such accidentally, that our only lasting hope for preservation is in the deliberate designation of areas to be preserved."

Mr. David R. Brower, Executive Director of the Sierra Club which has campaigned actively for the bill, stated in a letter to the *New York Times*, "One could hardly listen in on any of the hearings without realizing that the very opposition of the special interests in itself compellingly argues the need for the wilderness bill. They must know that the present protection of wilderness is conveniently weak — weak enough to allow commercial exploitation of those dedicated acres without too much trouble. The bill's added protection would make that exploitation harder (by providing for congressional review of what the various administrations choose to add to the system or delete from it), and therefore, they think, should be opposed with vigor. For that very reason the bill should be supported with vigor by the public as a whole."

A Colorado stockman, president of the Colorado Wildlife Federation, spoke from long experience when he testi-

fied at the Denver hearings: "My father and I have seen this good country hurt and civilized, but more recently have seen a good gain back to nature and beauty through conservation. . . . This part of the National Forest (a portion near Macht's ranch) is becoming littered, rutted and very civilized. A few miles from the ranch is a wilderness area — it has remained natural and beautiful. No stockman wants to see vital watersheds wasted in any way — whether by overgrazing, by fire, or by erosion caused by wheel track and jeep roads. I believe protection by the wilderness legislation is a good answer to these problems." Mr. Macht concluded with the aim of the Federation members "to have something left in a wild form for their children and grandchildren to enjoy as they enjoy it."

The Wilderness Bill, first introduced in the 84th Congress, was considerably modified to meet objections. It no longer lists specific areas to be preserved; nevertheless, its passage would act as a great deterrent to the using up of wilderness areas. European naturalists have been impressed with our great natural parts which contradict the criticism often made by our enemies, that we care for nothing but dollars. The Wilderness Bill when it becomes law will help to ensure the preservation of these natural areas.

Hearings on the bill are scheduled for March 30th in Seattle, Washington, and for April 2nd in Phoenix, Arizona, with additional hearings expected later in Washington. Letters were reported at previous hearings as running 50 to 1 in favor of enactment.

### TRANQUILLIZERS ABATE ANIMAL SUFFERING

It is regrettable that scientific institutions have made so little progress in adopting the use of tranquillizers and other drugs to reduce nervous tension, discomfort or pain in the animals kept in laboratories.

The livestock industry appears to be moving forward much more rapidly in the use of new, humane drugs with resulting improvement in revenue. The Jensen-Salsbery Laboratories are to be especially commended on their active promotion of DIQUEL, a tranquillizer for cattle.\* The company's series of two-page advertisements in "The National Provisioner" make a number of telling points which combine profits with kindness:

"Diquelized cattle bleed better to give you less dark-cutting meat . . . remain calm before slaughter for more tender cuts!

"Diquelized cattle consistently produce higher grading . . . lessen buying guesswork!

"Diquelized cattle are more docile, easier to handle. . . Diquel reduces mishaps and offers an important assist to more humane slaughter!

"Diquelized cattle load and ship better, show fewer bruises on the carcass and fewer scars on the hide!"

The tranquillizer keeps an animal calm for three days after injection, thus providing for shipment and slaughter with a single dose. This simple means of reducing fear and anxiety in cattle suddenly subjected to the series of strange, uncomfortable and often painful experiences involved in loading, shipping, and unloading is expected to save the livestock industry as much as one hundred

\*See also Information Report. Vol. 7 Nos. 2 and 5.

million dollars a year by 1) preventing much of the loss from bruises and from crippling and death in transit of animals who have suffered too severely to survive, and 2) cutting handling costs. No doubt much of the present prodding, kicking and beating inflicted by impatient and cruel handlers will end when the peaceful animals allow themselves to be moved about with less resistance.

First-hand reports from buyers as quoted by "The National Provisioner" include the statement that a Polled Hereford bull was "perfectly at ease" after a few miles on the road. "After travelling some 135 miles in a trailer, he was a perfect little gentleman. You know eleven hundred pounds of fifteen month old bull can make you gray ahead of time." Another tranquillized bull "remained calm and quiet and lay down in the truck after being hauled about 100 miles."

As for steers sent to slaughter, a recent test by expert food tasters showed that steaks from tranquillized animals are more tender and taste better than those from mistreated ones. Thirty-four food editors each ate two six-ounce sirloin steaks, one marked with a red, one with a yellow, skewer. Then they voted as to which of the two steaks was better. According to the *New York Times* of February 19, 1959, "Twenty-five editors thought the red-skewered meat was tenderer and better flavored; nine staked their judgment on the yellow. A sealed report from the Kansas City plant that had slaughtered the cattle was then opened. The report said that the meat marked with the red had been cut from three steers injected with a tranquillizing drug, while the other steaks had been cut from untreated animals." This improvement in meat quality by reducing suffering of meat animals should be still another incentive to the use of tranquillizers by the entire meat industry.

Tranquillizers are also being used to quiet calves immediately after weaning.

### PAINFUL POISON

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instances being given of misinformation and flat falsehoods issued by the pro-poison faction which has successfully misled the public so far.

The statement of an ex-poisoner, Lester Reed, indicates the general situation: "when I first began to trap and poison," he reports, "I listed all the animals I killed—and got called on the carpet. My supervisor admonished me, 'Report *only* the number of coyotes and bob cats killed, do not report other animals—it might bring public censure. Furthermore, my supervisor ordered me to hide the bodies of these other animals and birds, including farmers' dogs, so that the harm I was doing would not come to the attention of the public.'"

These official policies are clearly in conflict with the public interest. As the author concludes, "Every American has a stake in the Nation's remaining wildlife—whether it is in California or Michigan or Maine—and a responsibility to see that it is saved for future generations without further inroads by the serene bunglers."

Why should public funds be spent in such a manner as this? Saving of the tax-payer's dollars could be effected here to the benefit of the Nation as a whole. The poison-producing companies could change over to the manufacture of less cruel chemicals, and they should.

## ANIMALS AND CHILDREN

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spheres of endeavour should run parallel with the culture of the sentient nature from which stems the gracious qualities of kindness and compassion. If such a state of affairs could be achieved most of our troubles would vanish. A child is not born with a store of knowledge. He has to acquire it as he passes through his life. The seed is sown at his mother's knee and in his school or college. The training he receives fits him to run under his own steam thereafter if the urge of desire be present. The culture of the spirit follows a similar course and proper training leads to good maturation.

One of the best ways to sow the seed of kindness is to encourage children to keep pet animals. Even in this mechanised age most children like to possess an animate pet on which they can lavish their affection. There is a great affinity between children and animals, they have much in common, they understand one another and their association is to mutual benefit. Love and kindness flow freely between them and these qualities being grafted into the child help him in turn in his contacts with his human friends.

Children are always anxious to know more about their pets and in those schools in which the elementary principles of structure and function are taught the biology sessions are enjoyed and serve a most useful purpose. There have been reports that, in some schools and under the influence of enthusiastic teachers, the children's inquiries into the structure and function of their pet animal has been extended so that they witness experiments on living animals and are encouraged to pursue their researches at home. This is a thing to be deplored. Enthusiastic teachers of this nature should satisfy their search for knowledge in other spheres, i.e. in research institutions where they would work amongst mature colleagues and under strict control. They should remember that children are simply animals in the process of being trained to fit them for adult life. Children have not a great fund of knowledge on which to draw and they accept a teacher's dictates as gospel. If the teacher can see no wrong in children performing experiments on living animals then the natural consequence is that the boys and girls will likewise accept this diction in all innocence and it is probable that their desire to keep a pet will not be excited by the joys of love and companionship but, in order to test the reactions of the poor dumb beast, by pseudo scientific methods.

## DEPARTMENT OF AGRICULTURE SETS HUMANE SLAUGHTER STANDARDS

A news release from the United States Department of Agriculture dated February 26, 1959 gives the report that all supporters of humane slaughter legislation have been waiting for: the Department's designation of methods which packers must adopt to qualify for government contracts. The Department has done well in this most important step in the administration of the law. The statement it issued is quoted in full below.

"The U.S. Department of Agriculture today designated as humane three methods of handling and slaughtering livestock, in accordance with the provisions of the Humane Slaughter Law of 1958.

"The three methods are: *chemical*, the use of carbon dioxide gas for sheep and swine; *mechanical*, the use of captive bolt stunners, or gunshot on sheep, swine, goats, calves, cattle, horses and mules, and *electrical*, the stunning of swine, sheep, calves, and cattle with electric current.

"Designated methods require that the carbon dioxide gas or electric current be administered so as to produce surgical anesthesia in the animals quickly and calmly, and that the captive bolt stunners and firearms produce immediate and complete unconsciousness with minimum of excitement and discomfort. The animals must also be driven to slaughter-preparation areas with a minimum of excitement and discomfort. Areas through which the animals are driven must be free from hazards that might accidentally produce pain.

"The designations were made after advice and consultation with the Humane Slaughter Advisory Committee established in accordance with the law.

"Packers offering meat products for sale to Federal agencies after July 1, 1960, must comply with the law. A detailed description of the designated methods is scheduled to appear in the Federal Register dated Feb. 27, 1959.\*

"Ritual requirements with respect to slaughter are deemed by the Humane Slaughter Law to comply with the public policy it expresses, and are also exempted from the terms of the Act, and therefore need no administrative action.

"Research to improve acceptable slaughter methods and to develop other methods that comply with the intent of the law is continuing. As new or improved methods are developed they will be considered and evaluated, with the continuing help of the Advisory Committee."

\*Changed to March 3.

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This issue of the Information Report is devoted to a problem of serious concern to all thoughtful citizens: that of teen-age experiments on animals. The following editorial, written by a leading cancer research scientist, Dr. R. J. C. Harris, Head of the Department of Virology and Pathology of the Imperial Cancer Research Fund of Great Britain, was published in the Journal of the Institute of Biology, March, 1959 and is reproduced with the kind permission of the author. The Animal Welfare Institute agrees with it completely.

### "Will Cancer be Conquered in the High School Laboratory?"

"This is the grandiose title of a document published by the National Science Teachers' Association in Washington and reprinted and circulated to a number of institutions and individuals in this country by Universities Federation for Animal Welfare.

"The biology teacher who wrote this article spent three months in a cancer research institute ('one of the most glorious experiences I have ever had') and then transferred his work to the school laboratory where it continues with the assistance of his pupils.

"One of the many problems that they are investigating is that of cigarette smoking in its relation to lung cancer. The teacher has designed a 'smoking machine' (of which he is more than a little proud) and the children are now cooperating in toxicity tests in mice with nicotine and will soon be tracing smoke pathways with radioactive cigarettes. Other work involves transfer of a mouse ascites tumour and, for the investigation of the action of heat on tumour cells, subcutaneous implants of tumours are made into the tails of mice and these are then heated. 'Necrosis frequently results with subsequent self amputation of the tumour and distal tail. These mice live longer than the control mice.' Excision, under anaesthesia, is also practised since 'surgical procedures are especially thrilling to pupils.'

"The children are believed to acquire in this way 'an impersonal and objective attitude' towards the many animals used in such 'research' and some of them, having overcome their initial 'squeamishness or fear' have taken 'mice and other animals home to use in experiments conducted in their own rooms or basement.'

"The disturbing feature is that with all the variety of plant, bacterial, insect, and such-like material available the National Science Teachers' Association should not only appear to endorse such crude and practically valueless vivisection but further suggest that 'This program can be applied to any high school science class and based on almost any central theme.'

"We must agree with U.F.A.W. that so-called research programs of this kind not only give school children a quite artificial picture of the seriousness, difficulty and responsibility of animal experimentation but also tend to inculcate a callous and cruel attitude towards the animals themselves.

"We may be thankful that, in this country, such amateur dabbling is illegal and we trust that those in the U.S.A. who are responsible for education may be brought to see the dangers inherent in 'research' of this kind.

R. J. C. HARRIS"

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The STAR '58 (1958 Science Teacher Achievement Recognition Program) article\* referred to above by Dr. Harris was called to the attention of the British School Nature Study Union, which issued a formal resolution, printed below. Comments by individual teachers and pupils were also sent to the National Science Teachers Association, and some of them are reprinted, with permission, following the resolution.

### RESOLUTION TO NATIONAL SCIENCE TEACHERS ASSOCIATION

"The Executive Committee wishes to protest against the spreading of the idea amongst teachers that the kind of work described in *Star* 1958, 'Will cancer be conquered in the High School Laboratory', is to be encouraged, and not discouraged in the strongest possible terms. The reasons given are set out on the accompanying sheets.

"The great influence of the United States in the field of education in many parts of the world, an influence which is felt in this country by a number of science text books for schools now entering this country from the U.S.A., makes the matter one which we feel merits the attention of educational bodies in this country.

"It should be known that such experiments on living animals would result in Great Britain in a prosecution under the Cruelty to Animals Acts and we beg that, where there is no protection by similar acts, the educational world should act according to the highest moral principles in the matter.

"It may be that the National Science Teachers' Association has circulated this work in order to create discussion of the desirability of the methods used. If so, we hope that the nature of the criticisms made of it will be given wide publicity.

"The opinions of a visiting Israeli Inspector of Schools, the Head of a very large bilateral school, comparable with an American High School, and three experienced local education authority inspectors of schools have been obtained. They were all deeply shocked that such an approach to Biology teaching could be met with in schools and even more so that it received apparent approval from an official organization of teachers.

"The School Nature Study Union views with alarm the publication and circulation of the program sponsored by the National Science Teachers' Association (U.S.A.) including 'Will Cancer be conquered in the High School Laboratory'. Whilst it recognises that it is inherent in Science teaching to encourage children to make discoveries

\*Copies of this article are available from the Animal Welfare Institute on request.

for themselves, it deplors the fact that the invention and use of apparatus to cause mice to inspire noxious materials and the invention of a perfusion apparatus is considered suitable for work in school.

"That pupils should be allowed to make routine weekly transference of cancer cells interperitoneally in mice, assay cells for viability by injection in mice, induce tumours, excise tumours ('surgical procedures are especially thrilling to pupils'), remove gonads, cause mice to eat cigarettes and study metastases must induce in those carrying out these projects a callous and even cruel attitude to animals. That students should take home animals to use in experiments conducted in their own rooms and basements must lead to cruelty.

"Apart from the fact that pupils must inevitably become regardless of the sufferings of animals by carrying out these experiments in the guise of cancer research, they are given a completely false picture of the responsibility and difficulties of serious research, when their knowledge of normal animals' structure and general biological principles are necessarily extremely limited.

M. J. SELLERS, Secretary,  
School Nature Study Union"

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Letters Sent to the N.S.T.A. by individual members of the Executive Committee of the School Nature Study Union.

Comments by Betty E. Bayliss:

"I should like to express my full agreement with the opinions already expressed and have little to add to these, except the following:

"1. On p. 18 the author gives the impression that he considers it a matter for congratulation that members of his class 'plunge into dissection with avidity'. I would have said that youngsters are normally all too eager to dissect and the problem is to make them acquire the necessary theoretical knowledge to profit by doing so. 'Dissecting', (although without knowledge it is little more than 'cutting up' animals) gives them a sense of importance and always needs curbing rather than encouraging.

"2. In my experience disease and abnormalities have a fascination for classes. The full attention of a class will always be given to hearing about anything pathological or abnormal; the normal is much less interesting. Judging by the contents of many newspapers etc. this morbid preference is well known. I consider Mr. Alaimo is exploiting a weakness of human nature and I am not at all surprised that his choice of subject and method of presentation of the work is so popular and I am sure that his management of the class is made much easier than it would be in a normal biology course.

"3. Disease and abnormality are not a proper study for an elementary biology course, or indeed for any biology course, since it is the province of medical science.

"4. I am afraid my knowledge of cancer research is somewhat vague, but I had the impression that work such as that described has no value as a contribution to knowledge; since cancer problems have now been shown to be problems of cell metabolism, the children are thus really being deceived about what they are doing. It is no more 'research' than are any of the routine experiments on plant physiology carried out by classes, since it is merely following well established procedures even though the apparatus may be original.

"5. The whole course of work described is hideous and cruel. In planning any school syllabus especially in

biology it is a sound principle to consider: 'Whatever things are lovely — think on *these* things'.

"6. I enclose also the comments of three of the girls I teach, (lest it be thought I have lost touch by reason of age with what youth thinks). Two are fourth-formers (one likely to specialise eventually in Science, the other in the humanities). The other is from the Lower Sixth General Course and will become a nurse.

Comments by a Pupil in Form 4:

"1. Vivisection and other experiments on live animals are only excusable when the process is a necessary and useful one. It is not necessary for school children to do these experiments for themselves. One dissected animal preserved in spirits is ample to show the pupil the organs of the creature; and any other experiment that it is deemed vital to show in process, could surely be filmed, the teacher being supplied with the details.

"2. Such experiments should only be carried out by mature people who have a good background in biology and are seriously contemplating a career in Science. They should not be carried out as part of a normal curriculum in schools. This forces the squeamish child to carry out, or at the least observe something which is against its nature, and on the other hand encourages the brutal child in its unwholesome habits.

"This is merely an opportunity for a child who has no intention of having a serious biological career, to practice spiteful tendencies which are rampant in so many young children.

"3. It is a way of killing a fondness for animals in children by leading them to think that animals are merely apparatus on which to practice theories."

Comments by a Pupil in Form 4:

"1. Vivisection should be employed only when necessary and it would be wrong to sacrifice the large number of mice which would be necessary.

"2. The research might not seem so important if young people in schools were allowed to 'play around' with it.

"3. At the moment it is optional to go on to the more advanced stages where vivisection is involved in the school curriculum, but if it were included in the general curriculum there would probably be a large number of people who would dislike the idea and feel quite sick at the prospect of it.

"4. On the other hand it would undoubtedly appeal to many people and perhaps appeal to their more cruel instincts.

"5. It would surely be better to know something about normal functions, thus obtaining a background knowledge, than to study disease at such an early stage.

"6. To see the results of the experiment would be an obvious deterrent against smoking."

Comments by a Pupil in Form L.6. (plans to nurse)

"1. While they are concentrating on this morbid aspect of biology, they are missing the enjoyment of living creatures in natural conditions.

"2. It is ridiculous to have many schools all doing the same experiments which have been done before, anyway.

"3. These teenagers could achieve no outstanding results as they have no qualifications in biology.

"4. Living creatures are being killed and subjected to pain and discomfort unnecessarily and unjustifiably.

"5. The sympathy of these teenagers is being destroyed and when adults, they may be in the circumstances when they need to have sympathy.

"6. It is not even as if all these children will be scientists.

"7. It is a means of letting teenagers indulge a vicious streak.

"8. Far from making them less afraid of cancer, they may become obsessed with it and become unbalanced mentally or emotionally.

"9. They are being taught to take life and so hold life very cheaply.

"10. Some of them are probably using the animals as toys and as means of amusement."

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**Comments by M. B. Whitaker, (Member Executive Committee):**

"The whole attitude to the work is contrary to moral training in education, where respect for life is vital. If children are trained to think they have every right to exploit smaller and weaker creatures in school, why not pet-animals at home? And from this it is not a far cry to their weaker and less fortunate human fellows.

"Of what ultimate value is this kind of work? Research projects must be most carefully controlled and this usually involves considerable knowledge of the field of work and also skilled techniques. Anyone who has trained sixth form Biologists or junior University students knows how difficult it is to acquire accuracy and skill in dissection of comparatively large, dead and therefore still animals, such as rabbits, and must realise how much error and consequent wastage of life is likely if children operate on living mice.

"How sound are the scientific educational principles involved? For a training and scientific method the child should formulate his own problem, devise a means of testing his hypotheses, and from the results obtained make his own deductions and draw conclusions and surely, the whole process should be completed within reasonable time limits, and is even then, only one of the educational disciplines which we wish our pupils to acquire.

"The 'blind eye' attitude of Section 2 Page 14 is quite contrary to any scientific training and is certainly not the best way to make use of one's imagination."

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**Comments by J. B. Hunt, (Member, Executive Committee):**

"Experiments on living animals are carried out by and under the supervision of, learned and highly skilled Research Workers to elucidate problems which need profound specialized knowledge before they can be undertaken. This work has no place in a High School Biology Course.

"Such skill and knowledge will not be found in a High School Biology class and the teacher's twelve weeks research experience at the Roswell Park Memorial Institute can hardly fit him to direct researches into the problem of cancer.

"It seems apparent that this teacher is furthering his ambition to do research into Cancer problems at the ex-

pense of giving his pupils a sound basic training in Biology.

"Such a course gives his pupils a distorted view of Biology since it is essentially Pathology on which it is based. The young people are encouraged to promote disease, destruction of tissues and death when they should be grounded in relationships of living things, their several parts and their relationships to their environments.

"To encourage young people to conduct surgical operations or any other experiments on living creatures is bad enough, but when such experiments are done in 'bed-rooms and basements' by unskilled hands, without supervision, and very little knowledge, the position is much worse; it is deplorable.

"No youngsters should be allowed to see a mouse suffering from a mixture of tobacco smoke and pepper or watch it amputate its own tail because of a painful tumour implanted by the youngster himself (or herself). Such experiences are bound to have a profound effect upon the youngster, despite all exhortations 'to be objective', 'get over squeamishness' or suppress all feeling of pity.

"Youngsters of this age are emotional; love battles with hate, kindness with cruelty, importance with humanity. The fascination of this course is a hidden form of sadism. It is in this respect that the greatest danger lies, for one emotion, overstimulated, can produce an emotionally unbalanced adult later on."

\* \* \*

**PRESS COMMENT**

Newspaper comment in Britain expressed similar views. Mr. John Moore's column in the *Birmingham Mail* of February 13th concluded, ". . . the picture of the American teenagers' mouse-smoking machine haunts me with horror, and if this is science teaching, then give me the humanities! Burns' poem, *To a Mouse*, learned by heart, teaches love and humility; the mouse machine demonstrates to the student nothing but contempt for one's fellow creatures, and a most damnable arrogance."

The *Manchester Guardian* of April 13th, under the heading "Vivisection as Homework", reported that The Universities Federation for Animal Welfare had complained to the American Ambassador concerning the promotion of cruel animal experiments by the National Science Teachers Association, and selected quotations from the article in question as follows: "'Surgical procedures are especially thrilling to pupils'. (The teacher) states that many pupils volunteered for biological work. 'After the first few weeks of school, there is an amazing absence of squeamishness or fear. In fact it frequently surprises me to see the avidity with which erstwhile timid pupils plunge into the dissection of rats, mice, rabbits, and dog sharks'. The pupils never give names to the animals. 'I prefer to have the pupils develop an impersonal and objective attitude towards them. It is too easy to become emotionally attached, and thus become strongly disturbed at seeing a "friend" handled directly.'

"He adds that 'a constant campaign is maintained to encourage students to get in touch with butcher's shops and slaughterhouses for fresh materials for dissection. Dissection of fresh material unfolds the delicate hues and the symphonic orderliness of organic creation. It discloses the very real beauty and harmony that perfuses all living things.'"

## NEED FOR ACTION BY THE NATIONAL SCIENCE TEACHERS ASSOCIATION

Major C. W. Hume, Secretary-General of The Universities Federation for Animal Welfare, in writing a protest to the National Science Teachers Association, outlined in full the objections of The Universities for Animal Welfare to the promotion of cruel animal experiments in schools. He stated, in part, "What is so horrifying about this document is that these fanatical and callous irresponsibilities are being recommended by the National Science Teachers Association to all American science teachers and to science teachers in other parts of the world where American influence prevails." Suggesting that the system recommended by the National Science Teachers Association in *Star 58* is "calculated to inject into the American population a generation of little sadists," he listed the procedures for use with and by children as recommended in the article:

1. LD-50 toxicity tests (p. 15)
2. Perfusion with an amateur apparatus devised by a schoolgirl (p. 18)
3. Forcing into the lungs tobacco smoke of such density as would otherwise 'provoke the violent shutting off of the glottis' (p. 15)
4. Routine weekly transfers of cancer cells peritoneally (p. 16)
5. Production of metastases, especially in the lungs (p. 17)
6. Various other procedures mentioned on pp. 16 & 17.

With respect to the scientific aspect, he pointed out that "The children are being given an untrue impression of the nature of biological research," and that the methods outlined "can only swell that army of pseudo-scientists who hamper genuine researchers by cluttering up the literature with worthless trivialities."

As the Information Report goes to press, the National Science Teachers Association has made no reply to this official communication of The Universities Federation for Animal Welfare sent several weeks ago.

The Animal Welfare Institute has had a long history of attempts to persuade the National Science Teachers Association to recommend in writing to their thousands of members that no pain or distress be inflicted on animals in science teaching, but the result has always been delay and confusion, although verbal assurances of agreement

with the Institute's position have been given. Since friendly cooperation in this matter has not been forthcoming, it is hoped that the sharp and clear criticism offered by experts from a country in which it is illegal to have "any exhibition to the public, whether admitted on payment of money or gratuitously, of experiments on living animals calculated to give pain", may help the National Science Teachers Association officials to understand the urgent need for application of fundamental humane principles in education.

The Institute's correspondence with individual science teachers suggests that few cruel experiments would be carried out but for the type of active promotion which is exemplified in *Star 58*. The National Science Teachers Association can put an end to them, and it should.

\* \* \*

### "HOPE IS MAINLY IN THE CHILDREN"

The following excerpts from a thoughtful and sensitive letter just received from Dr. John Collier, Professor Emeritus of Sociology and Anthropology at City College of New York, and former United States Commissioner of Indian Affairs, accentuate the importance of humane teaching in the schools.

Dr. Collier writes, "Each single advance in persuading or enforcing humaneness toward this or that class of animals may seem but a little gain, to one who bears in mind the whole range of the deeds of man. For example, the advance in laboratory humaneness which your organization seeks and which appears in Britain to have been accomplished by Darwin and others eighty years ago; or again, the advance in humane slaughtering just now being accomplished in the United States. But such 'little gains', while conceptually slight in the perspectives of inhumaneness, are *absolute* gains for the life experience of just so many animals. Viewed from *within* the life experience of the animals affected, each gain is worth infinitely more than the human effort required to win the gain.

"Also, every such gain which carries with it, and partly is based on, the economic advantage or scientific advantage of men, has a good chance to hold its own and to contribute its mite toward a general opinion that humaneness 'pays' . . ."

"The hope seems to lie in the changing of human minds . . . the changing of each individual man's view of himself is involved. This hope, at least in our culture, is mainly in the children . . ."

### ANIMAL WELFARE INSTITUTE

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## HIGH SCHOOL ANIMAL EXPERIMENT "ABLY FINANCED" FOR THREE YEARS BY U.S. TAXPAYERS

The following news item is reprinted in full from the Spring 1959 Newsletter of the National Association of Biology Teachers.

### "3-Year Research Grant Given

"Mr. Leonard Scheel and Art Baker, Crystal Lake, Illinois have received a three-year research grant sponsored by the Department of Health, Education, and Welfare, Division of Research Grants. This grant is ably financed for a three year period for the purpose of investigating the nutritional and hormone implication of growth in rats. They are completing the first year of the problem this school year. All in all, the impact of this problem on the superior students in their high school is the most dynamic thing they have witnessed in all their years of teaching. Mr. Scheel and Mr. Baker at this time are thoroughly convinced that the very greatest potential for creating vocational interest lies in the area of giving support for research to the capable science teachers. It is urged that NABT do whatever they can to stimulate national agencies and societies to take steps in this direction."

Citizens who do not want their tax dollars going to pay for animal experiments by high school youths which may not only be cruel to the animals but demoralizing to the students should let the U.S. Department of Health, Education and Welfare, Division of Research Grants, Washington, D.C., know their views, before a major program of grants to high schools gets underway. For a description of one set of cruel animal experiments recently carried out in a high school, see the preceding issue of the Animal Welfare Institute's Information Report, Vol. 8, No. 2. Dr. Wilber's letter in the next column gives the informed opinion of an experienced medical research worker and science fair judge.

The character of experiments noted above may or may not be such as to cause suffering to the animals involved, but there is nothing to prevent their doing so either by generally accepted codes or by regulation of the use of the taxpayers' money. On the contrary, those organizations and individuals who are active in promoting animal experiments in high schools oppose any regulation, either voluntary or compulsory, which would prevent the infliction of pain on animals by high school students.

The National Science Teachers Association and the National Society for Medical Research, for example, followed their familiar patterns on this subject at the recent NSMR Conference on the Legal Environment of Medical Science at the University of Chicago, May 27 and 28. When the members of a Conference committee considering animal experiments by high school students recommended that children should not keep animals under experiment at home, Dr. N. R. Brewer of the University of Chicago objected and urged that even this modest restriction be removed. Dr. Brewer, always loyal to the NSMR's advocacy of limitless animal experiments, insisted that there be no curbing of painful experiments by children. In support of his position, he said that children could be taught not to smoke by forcing mice to inhale smoke in classrooms and demonstrating how bad it was for the mice.

Mr. Phillip R. Fordyce, of the National Science Teachers Association, made a vigorous expression in favor of animal experiments by children. A science teacher in Oak Park, Illinois, a state in which animal experiments in secondary schools are prohibited by law, Mr. Fordyce openly spoke of the pride he takes in his students' experiments. One with which he expressed especial satisfaction during the Conference lunch was an experiment on a rat which a boy decided to provide with nothing but bourbon whiskey to drink. Repeated questions in the hope of learning that he at least meant bourbon mixed with water, or else that the animal's diet contained some item

(Continued page 2, column 2)

## LETTER FROM A PHYSIOLOGIST ON HIGH SCHOOL ANIMAL EXPERIMENTS

In the following letter, Dr. Charles G. Wilber, Chief, Comparative Physiology Branch, Directorate of Medical Research, U.S. Army Chemical Warfare Laboratories, Army Chemical Center, Maryland, clearly states the great issue on animal experimentation in his schools when he writes: "The matter, as I see it, is a moral one. When one causes pain and suffering to animals without grave reason, it is degrading to the human being." Moreover, he practices what he preaches, for as a judge for science fairs he has "always made it a strict policy to disqualify any exhibit which involves starvation experiments, surgical procedures, or similar experiments on living animals." The Animal Welfare Institute urges the National Science Foundation, the National Science Teachers Association, the Department of Health, Education and Welfare and all other groups associated with high school biology teaching to adopt the policy so wisely chosen by Dr. Wilber of his own volition.

June 4, 1959

"I read with interest and sympathy your Information Report for March-April 1959. You have emphasized a problem which has concerned me for sometime. I agree with the idea of student projects done at the high school and junior high school levels. However, I am violently opposed to the type of mutilation and needless 'medical' experimentation which you refer to in that issue of your Report.

"May I hasten to add that I am not in accord with some of the activities in which your Institute apparently has engaged. Specifically, I feel you are doing a disservice to humanity when you make it difficult for various research institutions to obtain animals from public pounds and the like sources for needed experimental work.\*

"However, I feel that in bringing the matter of needless experimentation by high school students to the attention of the public, you are rendering a very important service to the community and to biological research as a whole. The matter, as I see it, is a moral one. When one causes pain and suffering to animals without grave reason, it is degrading to the human being. It is certainly justified if the results which come from this pain and suffering are of sufficient value to over ride any other considerations. For high school students doing experiments which involve implantation of tumors, surgery, and such things, there is no moral justification.

"I have been a judge at numerous science fairs and I have always made it a strict policy to disqualify any exhibit which involves starvation experiments, surgical procedures, or similar experiments on living animals. I feel that these procedures contribute very little if anything to the biological education of the children involved. I can visualize so many unobjectionable experiments which could be done and which would give to these children a real appreciation of biological principles that the unimaginative and pedagogically unsound 'medical' experimentation at the high school level is ridiculous.

"May I call to your attention the fact that cultures of

(Continued page 2, column 1)

\*See page four for discussion of laws compelling the surrender of dogs from humane society shelters, their effects and purposes. This is a separate though not unrelated question and one which Dr. Wilber and other scientists of high principle might see in a different light had fundamental issues not been obscured by propaganda of the National Society for Medical Research and anti-vivisection societies. His letter is reprinted in its entirety because that was his request.

## EDITORIAL

Although only a single letter criticising the Animal Welfare Institute for its stand against cruel experiments by high school students was received after the mailing of some 11,000 copies of the last Information Report which was devoted entirely to this matter, we are aware that this letter represents the thinking of others who do not care to enter into a direct argument. It came from a college biology professor who stated: "It is true that a few children may be harmed by witnessing or participating in this so-called cruelty, but this harm could be far outweighed by the production of only one [underlining his] great medical researcher."

This glib acceptance of the harm done to children in our schools for the sake of a purely theoretical hope that a "great medical researcher" might result from the sacrifice of some of these children is, to the Animal Welfare Institute, abhorrent. It represents that dangerous dogma that the end justifies the means, in one of its most unpleasant forms. The moral character and mental health of children growing up today must not be sacrificed to the illusory dreams of greatness of a relatively small number of misguided individuals.

We do not know of any great scientist who favors cruel experiments for children, and we suggest that high school and college biology teachers read the writings of a physiologist who was undeniably great, Sir Charles Sherrington, to learn what such a scientist thought about "Man and His Nature" (MacMillan, New York 1941). A few excerpts from this volume may be of interest.

Sherrington speaks of the belief of philosophers of past centuries that "animal kind was simply food for man's body, draught for his plough, fur for his warmth, remedies

## LETTER FROM A PHYSIOLOGIST

(Continued from page 1)

yeast, protozoa, and bacteria can be used by high school students to great advantage in illustrating the effect of temperature, pressure, oxygen, drugs, growth, respiration, and other basic physiological functions. The use of such micro-organisms should be encouraged at the high school level.

"I make a suggestion to your Institute that you devise some sort of a manual or handbook for high school teachers of science. Such a manual would contain advice, suggestions, and references for biological material which could be used in science projects and fairs. I am quite sure that you will find many professional scientists in the biological field who share my views in this matter. If such a manual were distributed widely (as was your unique booklet on the handling of laboratory animals), it would do much to overcome the pernicious practice of permitting high school students to engage in unwarranted pain-causing procedures on warm-blooded animals.

"One need merely point out that the recent Nobel Prize was given to Beadle, Tatum and Luddeburg for work on micro-organisms. One can refer to the monumental physiological studies which have been made by Professor Heilbrunn of the University of Pennsylvania. In rare instances was it necessary for this professional scientist to use living material other than individual cells, protozoa, and the like.

"Again, may I encourage you to do all in your power to publicize the undesirability of having high school students do the type of experiment to which you refer in your March-April Information Report. I emphasize, however, that this does not mean I oppose even the most drastic experiments on animals when this is done by professional scientists who are investigating new biological pathways. In this case, the professional man should know what experiments are required to develop new knowledge. Use of warm-blooded animals merely to illustrate principles which are well known to me is incomprehensible and unjustified.

"If you wish to use this letter, I ask that you publish it *in toto* with no deletions or editorial changes.

CHARLES G. WILBER, Ph.D.  
Chief, Comparative Physiology Branch  
Directorate of Medical Research"

for his ailments." But, he points out, "New knowledge has put our creature-kind in a new perspective for us. They are in a sense drawn greatly closer to us. They are not now another order of being. They are our kith and kin. Their nature and ours are one. They are each and all impelled as are we by the same 'urge-to-live'. We and they are all comrades in one same great adventure—life."

In his concluding chapter, Sherrington discusses human evolution. He describes the attributes of predaceous man who "unlike other forms of predatory life preys on its own species." But, of course, this is not limited to his own species. "He exploits cruelty on sub-human lives as well as on human life."

Opposed to these ancient trends stands altruism. Sherrington writes: "Man's altruism has to grow," and he points out, "such altruism would provide awareness of others' suffering with psychical intensity more than that of mere observant intelligence." He shows the similarity between "those small beginnings of multi-cellular life of millions of years ago [and] the slender beginnings of altruism today. Evolution has constantly dealt with the relation between physical and mental as more than mere analogy. The bond of cohesion now arising instead of being as then one of material contact and interchange between related cell-lives is in its nature mental. It is a projection of the self by sympathy with other life into organismal situations besides its immediate own. It is altruism as passion. It marks, we may think, at the present time the climax of mind. It is well to note it is not essentially rational. It is often more germane to emotion than to reason. It belongs, if you will, to sentiment, and it can elevate sentiment so that reason at best ranks but as a tool for sentiment. It creates a reasoned emotion. It may have the conquest of the world before it, in which case reason will play its part, as a tool."

## HIGH SCHOOL EXPERIMENTS

(Continued from page 1)

such as lettuce which would provide considerable fluid, met with no encouragement. It was mainly dry cornmeal, Mr. Fordyce insisted, and the bourbon was straight bourbon. After four months of this form of sustenance, Mr. Fordyce stated, the animal was killed and his liver sliced and examined and lesions characteristic of cirrhosis of the liver were found. Mr. Fordyce appeared bitterly resentful that anyone might disapprove of such practices by teen-age youth. He urged that the Animal Welfare Institute should "have faith in science teachers."

Attitudes like those expressed by Mr. Fordyce and Dr. Brewer show how necessary it is for level-headed educators, scientists and parents to make clear their desire for humane science teaching. The last Information Report of the Animal Welfare Institute dealt with criticism of cruelty to animals described in an article on a prize-winning program of science teaching published by the National Science Teachers Association. Dr. Brewer reported that the Animal Welfare Institute had "seized on" this article because of "omissions" with respect to animal care. The constant attempts by spokesmen of the NSMR's inner circle to mislead other scientists are among the strangest phenomena in the controversy so insistently promoted by them and their opposite numbers among professional anti-vivisection copywriters. The fact is that there were no omissions in animal care which appeared from all statements and pictures in the article to be first-rate. The objections of the Animal Welfare Institute were to the cruelty of the experiments themselves, a description of some of which is included in the article by Dr. Palmer on page 3 of this Report.

When the Animal Welfare Institute's representative at the animal experimentation section of the Conference urged that the recommendations on high school science teaching include a sentence stating that experiments causing pain or distress should not be done at this educational level, no one present would second the motion, regardless of how it might be worded. The Chairman put forward that specious argument worn thin by opponents of the federal humane slaughter law which was enacted last year. He said he didn't know what was painful and what wasn't. Following this curious logic, of course, children's experiments needn't be limited to painless ones because it is impossible to say what is painless and what is painful!

On the word "cruelty" the NSMR takes a similarly aloof stand. According to the Society's attorney, modern proponents of animal experimentation "do not acknowledge in any degree that cruelty embraces animal experimenta-

tion, hence no exemption [from anti-cruelty laws] is required."

This increasingly authoritarian attitude, in which the scientist is presumed automatically to know best while the layman's feelings and rights are wholly subordinated, was illustrated in a different context in the report of the committee on Clinical Research (human experimentation). It is to be hoped that the Nuremberg Code on this subject, which was developed after the Nazi atrocities in human experimentation, will not be weakened to the extent recommended at the National Society for Medical Research Conference. The objections voiced to "barbed" legal language in the Nuremberg Code which might give rise to "legal technicalities" were not reassuring when combined with the expressed desire to change the Code's unequivocal requirement that the voluntary consent of the human subject is absolutely essential. The suggested new phraseology included such adjectives as "implicit" or "reasonably presumed" to modify the consent of the human subject. Many other softening phrases were put forward on the different points of the Code.

One speaker emphasized what he called "the dual purpose of medicine" and stated that the doctor must advance knowledge even if it involves investigation on the person he treats, because of the doctor's "obligation to the community". These are words which offer reassurance to the unscrupulous, and a means of rationalizing improper human experiments, without in any way helping the sound and ethical clinical research worker.

This kind of scientific extremism has marked too many of the programs of the National Society for Medical Research. It is time for humaneness and well-balanced thinking to made their claims in high schools, in research animal rooms and in hospitals.

### "THEY KNOW NOT WHAT THEY DO"

The current issue of *Nature Magazine* carries an article by E. Laurence Palmer, Professor Emeritus of Nature and Science Education, Cornell University, and Director of Nature Education, the American Nature Association, which discusses the STAR '58 award for painful animal experiments in a high school. Dr. Palmer's views as an experienced science educator should be of great value to those responsible for setting standards in biology teaching, and his article is printed in full below.

#### A Question of Judgment

On April 4, 1959, at the Seventh National Convention of the National Science Teachers Association, a Department of the National Education Association, Angelo C. Alaimo of Kensington High School in Buffalo, New York, presented a paper entitled "Demonstration of the Latest Mouse Smoking Device for Studies of the Relation Between Cigarette Smoking and Lung Cancer." Apparently, the project described had been stimulated by a summer fellowship in cancer research at the Roswell Park Memorial Institute in Buffalo. Following this, the high school teacher had transferred the attitudes, methods and objectives, which may have been proper in an upper echelon research laboratory, to his high school classroom with little or no modification. Was he right in so doing?

The study was recognized as being one of the winning entries in the 1958 Science Teacher Achievement Recognition Program. It was one of fifteen entries to win awards of \$250 or more. It had been reported in an elaborate brochure entitled "Will Cancer Be Conquered in the High School Laboratory?" published by the National Science Teachers Association and edited by Abraham Raskin, Professor of Physiology and Coordinator of the Sciences (Science Teacher Program) of Hunter College in New York City.

#### Students helped

According to the report, high school students helped develop a device by which they were able to force white mice to inspire "noxious materials that might provoke the violent shutting off of the glottis," in spite of the fact that "a mouse can hold its breath for almost three minutes against noxious inspirations." The students apparently traced in the mice mixtures of starch and pepper and plan to use the smoke of radioactive cigarettes.

The students worked on more than a dozen projects dealing with this smoke-mouse study. They helped develop the device that forced the mice to smoke. They induced tumors in the tails of their mice, operated to remove tumors, removed the gonads to observe if this had any effect, and intend to experiment with other glands in the future. They injected cancer cells into living mice and studied the effect of chemicals on what happened in the lungs. Eventually the work done by the teacher in the research institute was transferred completely to the school laboratory.

This high school laboratory prides itself in making "as great a variety of living specimens as possible" available for use by the students, and many students "have taken mice and other animals home to use in experiments conducted in their own rooms or basements." The teacher reports that "after

the first few weeks of school there is an amazing absence of squeamishness or fear."

Among other things, the teacher reports: "We never give names to our animals. I prefer to have the pupils develop an impersonal and objective attitude towards them. It is too easy to become emotionally attached, and thus become strongly disturbed at seeing a 'friend' handled directly. This objective attitude enables us to make use of many animals in our work." I cannot refrain here from reminding Mr. Alaimo, and those who have applauded his work, that Buchenwald, of which he must have heard, was the temporary and terminal residence of thousands of human beings for whose names their captors substituted numbers. Greatness and success do not come alone to those who sacrifice compassion to objectivity.

#### Question of benefit

You may say that all of this work is directed towards the solution of a major problem of the day, and that no one would hesitate to sacrifice if it was known to be of benefit to man. Here I simply cannot refrain from personal views and experiences. The useful study of cancer by anyone is of major importance to me. I have lost a number of my closest relatives to the disease. Four years ago my physician told me that I unquestionably had it. I know only too well the terrifying fear that comes to one who alone faces up to the fact for the first time that he has a fight on his hands, and there you are alone at night fastened tightly in a hospital bed. Almost anything that will be effective in understanding and controlling cancer is, so far as I am concerned, worthy of encouragement.

#### Situation mastered

Fortunately, in my own case, I believe that the situation has been met and mastered. I have no fear whatever that I am more likely to die of that disease than of any other. I also hope that we will recruit into our medical profession the highest quality of manhood and the best minds to fight cancer. Two of my close relatives were successful physicians and surgeons. For two or three decades I was closely and dynamically associated with top-notch physicians and surgeons from coast to coast. Almost invariably I have been impressed by the compassion these professional folk have shown genuinely for their patients. I question whether the program of Mr. Alaimo—lauded by the National Science Teachers Association as appropriate for high school students—will develop the kind of person who will do an effective job here. I hope that our teacher training program never becomes dedicated to the task of making even doctors into automatons with a wholly "impersonal and objective attitude" towards any warm-blooded animals. Certainly let us not deliberately wipe out sympathy at the high school level.

The situation created by this high school program is not of local significance. A report of the original awards reached England. It was reprinted in Great Britain. Three important individuals there were instrumental in calling the story to my attention. I wish I might quote their mimeographed and written commentaries in full. They objected particularly to the fact that the situation resulted in surgical procedures becoming "especially thrilling to the pupils," and felt that the cause might well be the "quasi-adolescent attitude of the teacher." They wrote that they were "startled and to put it frankly shocked that what seems to be a responsible body should encourage children to perform" these kinds of experiments on live animals. Their official group took published exception to at least ten aspects of the situation. I know at least one of these English critics well, and he is far from being a nambypamby crackpot. He is a well-trained and dedicated leader.

I also have much respect for the National Science Teachers Association and Executive Secretary, Mr. Robert Carleton, but feel that this time they missed the boat. My local paper, *The Ithaca Journal*, on April 4, 1959, carried on its front page center a large Associated Press wirephoto of the mouse smoking gadget made by Mr. Alaimo. It indicated that it was of the "Rube Goldberg" type, overlooking the points raised in this commentary, with the possibility that it might have some Mephistophelean qualities. I assume from this Goldberg reference that we were supposed to laugh at what was done, but I question whether our English friends will be able to see the point of this American "joke." Maybe we should re-examine our concept that Englishmen cannot see a joke, and examine ourselves. I do not remember any great roar of laughter on either side of the Atlantic over the Buchenwald experiments that started with taking the names from human beings, giving them numbers and then, in the name of science, carrying on some experiments that shocked the world. The director of the Roswell Park Memorial Institute, which sponsored the original study, flattered Mr. Alaimo and, apparently, the awards committee of the National Science Teachers Association. When, rather ungrammatically, he wrote on February 13, 1958: "We have discontinued using our own model and awaiting the perfection of your improved apparatus." Personally I hope that high school science teachers of biology generally will not follow the educational pattern outlined by Mr. Alaimo, even though it was rewarded by adoption by a State-supported research institution in New York, commented on favorably by the National Cancer Institute and chosen as one of fifteen of the best of 369 entries for recognition as good teaching in "every part of the United States, representing schools both small and large, and public as well as private and parochial schools."

In all this glory let us not forget what the program may be doing to the youngsters themselves, even if we can forget the mice; and other animals. Let us hope that we can forgive these educational Solomons for, we believe, they "know not what they do."

## HIGH SCHOOL STUDENT TRIES TO CAUSE LEUKEMIA WITH VINEGAR

Another instance showing the wrongness and worthlessness of children's experiments which inflict suffering and slow death on animals, and the callousness they bring about, is given in the current quarterly publication of the Animal Rescue League of Boston. The editorial which describes some of the League's experiences in this field is reprinted below:

### "Is This Necessary?"

"League officials are becoming increasingly concerned over the widespread use of animals for experimentation by secondary school students. Some experiments are prompted by studies in the class room; others are performed in connection with local or national science fairs where students carry out experiments at home by the hope for or actual receipt of cash prizes.

"What type of research are some of our young people doing? Well, here are a few examples of actual cases reported: (a) Inducing diabetes in mice by removing the pancreas, (b) Transplantation of ovarian tissues on female mice, (c) Injection of frozen spider venom in mice for the purpose of observing symptoms of black widow poisoning as the mice died, (d) Dissecting mice to investigate their immunity to tumor transplants.

"Recently a high school girl visited the League's clinic and presented two white mice for examination. One was dead—and had been for several days—and the second proved to be sick and was put to sleep. The League veterinarian made a particular point of questioning this girl and learned that originally she had owned two mice, but had bought four more from a pet shop in order to perform a nutrition experiment for a science fair at the school which she attended. All had died except the mouse presented for examination. The girl seemed to have no idea of what she was doing or what she was trying to accomplish. Her main concern seemed to be to secure a statement that it was impossible for her to complete her experiment.

"A telephone inquiry to the League's clinic receptionist by the mother of a high school student revealed another case. This time it was a request to run blood counts on several groups of white mice. In one group the student had been trying to develop leukemia by feeding a high concentration of vinegar, while two control groups had been fed a regular diet of mice pellets.

"There is no justification for such needless suffering being inflicted in the name of science. No new knowledge or anything of a practical or theoretical importance is gained. Such research is uselessly inhumane. Of far greater value to the student at this stage of his career would be an understanding of man's dependence on animals and the role they play in everyday life.

"It is extremely vital that educators, scientists, humanitarians, and parents demand that science fairs exclude any experiments or exhibits which inflict suffering on any animals."  
—C.E.B."

## WHERE SHOULD LABORATORY DOGS COME FROM?

The question was raised on page one of this Information Report of the Animal Welfare Institute's "doing a disservice to humanity when you make it difficult for various research institutions to obtain animals from public pounds and the like sources for needed experimental work." Several points must be covered in replying to this question.

1) The Animal Welfare Institute has never prevented any needed experiment from taking place by any means whatever.

2) The Animal Welfare Institute has never objected to purchase of animals from public pounds or to other commercial transactions involving the buying of animals by

laboratories.

3) One of the chief members of the Animal Welfare Institute's Advisory Committee was a physiologist who used animals purchased from a public pound. He and all other members of the Advisory Committee were in full agreement, however, that legislation of the type sponsored by the National Society for Medical Research to compel humane societies to release animals from their shelters for use in laboratories for experimental work of all types, regardless of the pain which might be inflicted, was morally wrong and should be resisted by all available means.

4) The Animal Welfare Institute's position was presented in its prospectus published in 1952 as follows:

"Procurement Programs: The survey of existing and proposed programs for the procurement of laboratory animals in an effort to discover the best method of satisfying the needs of humanity in the advancement of medicine, public health, agriculture, etc., without jeopardizing practical animal welfare work or the general advancement of humanity through increasing consideration for all living creatures."

This position has been maintained throughout the seven years of the Institute's existence. The best solution to the procurement problem known to the Institute is to provide animals for non-survival experiments under full anesthesia from public sources wherever such animals are needed, and to breed animals for chronic experiments. But this solution is opposed so strongly, not only by anti-vivisectionists but by the National Society for Medical Research, that it has had very limited use to date.

5) Promotion of painful animal experiments by school children is destructive of compassion. Another means of destroying sympathy and compassion is to undermine animal protective societies or to force them by legal and economic pressure to give up the principles on which they were founded. This the animal seizure laws and other efforts to obtain experimental dogs and cats from humane society shelters are perfectly designed to do.

Because of the character of animal protective work in the United States, this single means of attack very nearly succeeded in breaking the back of the humane movement. In 1946 when the National Society for Medical Research began its campaign, there were only two types of societies of any strength or consequence which concerned themselves with cruelty to animals: 1) societies which operated shelters (many of which had taken over operation of pounds to prevent the cruelty formerly practiced there), and 2) anti-vivisection societies. If the non-antivivisectionist societies could be used to procure animals and their names used as an endorsement of limitless experimentation on animals from their own shelters, then only the easy-to-discredit anti-vivisection societies would be left; for the moral stature of the shelter societies would be lost and no more than a shadowy memory of their original strength for combatting cruelty would remain. It may not have been intentional, but the results of National Society for Medical Research policy **have been anti-humane** rather than anti-anti-vivisectionist. In at least one city where an animal seizure law is in effect, one has only to walk down the street seeking the owner of a lost puppy to have one ordinary person after another warn, "Whatever you do, don't take the pup to the SPCA."

### ANIMAL WELFARE INSTITUTE

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## SENATE COMMITTEE URGES PROPER CARE AND HOUSING OF LABORATORY ANIMALS

An excellent statement on the welfare of laboratory animals has resulted from Senator Mike Monroney's humane concern for these animals.

The Report of the Senate Committee on Appropriations, on H.R. 6769, (the Department of Labor, and Health, Education and Welfare, and Related Agencies Appropriations Bill, 1960) states on page 24 and 25:

"It has come to the attention of the committee that many of the research programs to be operated with the appropriations provided in this bill involve the use of animals for experimentation and that in many instances totally inadequate facilities are provided for housing them in a humane manner consistent with the experiments being conducted. The committee strongly urges that every effort be made to provide suitable and comfortable quarters and that these animals not be subjected to the unnecessary cruelty involved in their being carelessly and improperly housed.

"The maintenance of such quarters for animals used in research is a proper expense of such activities."

In many instances when representatives of the Animal Welfare Institute have criticized overcrowding and failure to provide comfortable resting places for laboratory animals, they have been told that there was no money to provide decent quarters and that research grants did not allow for care or housing of the animals involved. This new statement on government grants should effectively remove any doubt on the matter so far as grants coming from the United States Treasury are concerned. If animals used in experiments financed by the tax-payers are not properly housed and cared for, the blame must be placed squarely on the grantee, who fails to take sufficient interest in the well-being of animals in his charge, and on the institution in which he works.

## THE PRINCIPLES OF HUMANE EXPERIMENTAL TECHNIQUE

An excellent new book for investigators who use experimental animals, entitled "The Principles of Humane Experimental Technique", represents five years of study by Dr. W. M. S. Russell and Mr. R. L. Burch under the sponsorship of the Universities Federation for Animal Welfare. The book presents a full discussion of the three main modes of making experiments both more humane and more efficient:

- replacement* of animals as objects of experiment by insentient material such as tissue cultures;
- reduction* in the numbers of animals used to obtain results of given precision, chiefly by controlling individual variation in their physiological responses;
- refinement* of procedures employed when animals still have to be used.

The book should be of particular interest to experimental biologists and those engaged in human and veterinary medicine, teaching and the pharmaceutical industry. It is available from the Animal Welfare Institute office at \$4.20 per copy.

## PROGRESS AND RETROGRESSION IN THE STRUGGLE FOR HUMANE BIOLOGY TEACHING

Progress in discouraging cruel animal experiments by children has been made since the last Information Report gave an account of the current situation. It appears that the views of distinguished humane scientists exemplified by Dr. Chauncey D. Leake, Dean of the College of Medicine at Ohio State University and President-elect of the American Association for the Advancement of Science, are beginning to take effect. Dr. Leake recently wrote: "It seems to me that it is wise to avoid getting our youngsters so enthused over biological sciences that they are anxious to undertake extensive animal experimentation without the background, the experience, the judgment, or the wisdom, that is necessary in handling animals appropriately for complicated biological experimentation. In other words, I think we had better continue to learn the hard way: there is plenty of biology to be gotten from a study of unicellular organisms that can be readily obtained in any high school laboratory, and handled and followed with skill and convenience. We are apt to get into trouble using animals." Children and animals will benefit if Dr. Leake's wise advice is followed by all science teachers.

Two encouraging developments in the effort to prevent painful experiments by immature youths are:

1) The 1960 Science Achievement Awards for Students, conducted by the Future Scientists of America Foundation of the National Science Teachers Association and sponsored by the American Society for Metals, announce ten rules for participants. Rule eight states: "Project reports giving evidence either of unsafe procedures in experimentation with rockets or of cruel and inhumane treatment of animals will not be considered for awards in this program." Those responsible for the inclusion of this sensible and much-needed rule are to be congratulated for their wise action.

2) In response to letters of protest against the expenditure of Government funds to encourage high school experimentation on animals, Dr. Ernest M. Allen, Chief, Division of Research Grants, Public Health Service, Department of Health, Education and Welfare, has issued the following statement: "There is no plan to make any additional grants to high school teachers for any purpose."

Readers of the Information Report who joined in the protest after learning of the three-year research grant given an Illinois High School are urged to lend their assistance in putting a stop to large grants of tax funds for cruel experiments by high school youths currently being provided by the National Science Foundation, an independent federal agency over which the Department of Health, Education and Welfare has no control.

The Waldemar Medical Research Foundation of Port Washington, N. Y., under the direction of Dr. Norman Molomot, has been a leader in promoting painful experiments by high school students and in obtaining publicity for these activities. An article in the September 6, 1959, issue of the *Long Island Press*, (Jamaica, N. Y.) states: "A summer science program for high school students, which a Port Washington laboratory initiated five years ago, has mushroomed into a national institution. The successful educational pattern established at the Waldemar Medical Research Foundation has been copied by the Federal Government and is carried on in 105 schools and colleges in 35 states. . . . The student's program, which:

began June 29th, was financed under a \$14,000 grant from the National Science Foundation which sponsored similar projects at other institutions . . . the work which fascinated the students most centered in the laboratories. Here they became adept at handling more than 8,000 lab mice and acquired such skills as injecting tumor materials, making histological sections and performing autopsies. Out of the lab experience came a wealth of useful data on cancer including the use of electric shock to stimulate tumor development in mice. One group was amazingly successful in its efforts to vary tumor behavior through the injection of alcohol—in this case vodka—into the stomach.”

The New York *Daily News* of August 9, reporting the same story, noted: “Adding spice to the learning for the youngsters is the \$200 each one gets for attending the eight-week course.”

The students ranged in age from 15 to 17 years.

Everyone who believes that painful experiments should not be carried on by immature persons, and who does not care to contribute through Federal taxes to programs such as the one described above, should express his views to The National Science Foundation, 1951 Constitution Avenue, Washington, D.C.

It should be noted that, although the news story quoted above states that similar programs are being carried on in 105 schools and colleges in 35 states, many of these are programs in which no animals are used. There is no need, in any scientific program for high school students, to inflict suffering on animals. A simple ruling by the National Science Foundation in the awarding of grants could put an end to painful experiments by high school students working under its sponsorship. It is important that the National Science Foundation be made aware of the deep concern felt by citizens throughout the nation.

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### FALSE CLAIMS BY CHILDREN'S "MOUSENIK" PROMOTERS

Newspaper publicity has been used by the promoters of children's experiments on animals to create the illusion that activities such as the launching of home-made rockets containing live mice have the endorsement and encouragement of responsible scientists and agencies of the United States Government.

The Animal Welfare Institute checked on two of these stories, and the replies are reprinted in full below:

From Dr. Wernher von Braun, Director, Development Operations Division, Army Ballistic Missile Agency, U.S. Army Ordinance Missile Command: “I have your letter of 22 July stating that it has been brought to your attention that I am alleged to have encouraged high school youths to launch amateur rockets containing live mice. Please be assured that your informant's story is baseless and the allegation false. I have never encouraged youth to experiment with mice or any other animals. As a matter of fact, I have discouraged them from experimenting at all with amateur rockets unless the experiment is under the supervision of an experienced older person. I trust that this answers your question.” (An Associated Press story of May 6, 1959, had stated: “Three young rocket experts are preparing to launch a mouse-carrying missile they constructed with advice and inspiration from Dr. Wernher Von Braun. . . . ‘Keep up the good work and you can join my team at Huntsville,’ von Braun wrote in his last letter from the Redstone Arsenal in Alabama.”)

From Mr. T. Keith Glennan, Administrator, National Aeronautics and Space Administration: “The story mentioned in your letter to me dated 6 October is false. So far as I know, we have no involvement with the activities of Boy Scouts on Long Island in rocketry or in any other way.” (A New York *Journal-American* story of September 22, 1959 had stated: “A Boy Scout troop in Hicksville, L.I. is building a three-stage rocket which will be launched next June with a live mouse in the nose cone, it was disclosed today. The missile is being built by 17

members of Scouts Explorers Post 575 and is under the general direction of the National Aeronautics and Space Administration. The boys range in age from 15 to 17 . . . the solid fuel rocket will be 16 feet in length and is expected to reach a height of 20 miles when it is launched from an army post somewhere in the West.”)

It is good to know that no encouragement for improper experiments by untrained youths is coming from these official sources.

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### NEW LAW PROTECTS WILD HORSES AND BURROS FROM CRUELTY

On September 8th, H.R. 2725, the bill to prohibit motorized pursuit of wild horses and burros, or the pollution of water holes on the public lands, was approved by President Eisenhower and became law.

Introduction of the measure was the result of a long campaign by Mrs. Velma Johnston and other humane citizens of Nevada, the State in which the largest numbers of wild horses still remain. It is estimated that about 6,000 still range the mountains there, most of them on land belonging to the United States. Hundreds of thousands have been killed with extreme cruelty since the Second World War and sold for pet food.

Representative Walter Baring of Nevada introduced the bill to prevent cruel methods of capture in 1958, but no action was taken on it till 1959, when a subcommittee of the Judiciary Committee of the House of Representatives held hearings July 15th under the chairmanship of Representative Thomas J. Lane on the Baring bill and similar bills introduced by Representatives Alvin O'Konski (R. Wis.), Merwin Coad (D. Iowa) and J. Carlton Loser (D. Tenn.). Mrs. Johnston gave detailed testimony, based on many years of effort and study. The Garden Clubs of America and humane organizations, including the Animal Welfare Institute, testified for the bill. No opposition was expressed except by representatives of the Department of the Interior which desired to be allowed to continue round-ups with plane and truck. The Department's proposed amendment was not accepted; the subcommittee voted unanimously for favorable action on H.R. 2725 without amendment. The full Judiciary Committee, under the Chairmanship of Representative Emanuel Celler, gave its unanimous approval, and the bill passed the House of Representatives by unanimous consent on August 17th.

In the Senate a companion bill had been introduced by Senator Mike Mansfield (D. Mont.) with the following co-sponsors: Senators Prescott Bush (R. Conn.), Howard W. Cannon (D. Nev.), John Sherman Cooper (R. Ky.), Paul H. Douglas (D. Ill.), James E. Murray (D. Mont.) and Richard L. Neuberger (D. Oreg.). When H.R. 2725 was passed by the House, it received prompt approval by the Senate Judiciary Committee and the Senate passed it by unanimous consent on August 25th.

Thus a long-needed reform received the support it deserved from the Congress. That support was both prompt and unanimous when the facts had been clearly demonstrated to responsible leaders. Sponsors and co-sponsors of the bills, and committee chairmen who helped bring about passage of the new law, deserve the gratitude of humane citizens throughout the country.

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### PROGRESS OF HUMANE SLAUGHTER

State humane slaughter legislation has now been passed by the States of Washington, California, Minnesota, Wisconsin and New Hampshire. These laws are designed to protect the approximately 10% of animals slaughtered by packers who are not covered by the Federal law enacted in the summer of 1958. It is expected that many more States will follow suit during the coming legislative session.

The Canadian Parliament enacted humane slaughter legislation on July 15th which will protect an estimated 80% of animals slaughtered in that country.

The George A. Hormel Company was the first and the Oscar Mayer Company the second nationwide packer

to establish the use of humane methods for every animal of every species of livestock slaughtered in all their plants. Substitution of painless methods for the cruel former ones is taking place throughout the country, and *The National Provisioner*, weekly magazine of the meat-packing industry, has done an excellent job of reporting in this field. It has printed technical articles on the following:

The construction of the first new slaughtering facility using humane methods for all species by the Cudahy Packing Plant in Wichita, Kansas, where cattle and calves are stunned with captive-bolt pistols and hogs anesthetized with carbon dioxide.

The installation on July 29th of the first oval system for anesthetizing hogs with carbon dioxide in a plant in the United States—The Tobin Packing Company's Albany, New York, plant.

The installation of a similar oval unit by Canada Packers, Ltd. at Toronto, where as many as 12,000 hogs per week are dressed and the use at its smaller plants of a penetrating bolt stunner for hogs. (All plants of Canada Packers, the largest meat processor in Canada, have been directed to acquire facilities for humane slaughter.)

The completion of the first in-line carbon dioxide anesthetizing tunnel for a moderate-sized plant by Hormel's at Mitchell, South Dakota, with a rate of 240 hogs per hour.

The development of new electrical stunning equipment by the Englehorn Packing Company in Newark, New Jersey.

At the annual convention of the American Meat Institute held in Chicago September 25-29, a major session was devoted to practical application of the three humane methods: anesthetization, mechanical stunning and electrical stunning. *The National Provisioner* report on this meeting makes clear that "Not much time remains for slaughterers to modify their techniques to bring them into compliance with the federal law and regulations, and there is no hope that a time extension will be given." The federal law requires that by July 1, 1960 any packer wishing to make a contract with the government of the United States must use humane methods of slaughter on all animals in all of his plants.

Inquiries addressed by individuals to local packers, as to when they expect to have completed adoption of humane methods, would be timely.

## OIL POLLUTION OF THE SEA International Conference in Denmark

by

PHYLLIS BARCLAY-SMITH

Secretary, International Council for Bird Preservation

An international conference on oil pollution of the sea was held in Copenhagen on July 3rd and 4th, 1959. This was organized by the Co-ordinating Advisory Committee on Oil Pollution of the Sea, a group of people representing the interests in Great Britain which are most affected by oil pollution, who formed themselves into a Committee, under the Chairmanship of Mr. James Callaghan, M.P., in order to concert action to secure a solution of the problem.

This Conference was attended by a very wide representation of interests including representatives of government departments of transport and commerce, shipowners, port authorities, ship repairers, seamen's Unions, sea-fisheries associations, local authorities, pleasure resorts, tourist organizations, hotel and restaurant associations, and conservation, ornithological, and humanitarian organizations, of many countries, together with the diplomatic representatives of 19 nations. In addition, seven international bodies, I.M.C.O., F.A.O., the Council of Europe, the International Union of Biological Sciences, the International Council for Bird Preservation, the International Union for the Conservation of Nature and Natural Resources and the World Federation for the Protection of Animals were represented.

The object of the Conference was to discuss, among

other aspects, how far the International Convention for the Prevention of Pollution of the Sea by Oil (London 1954) has been effective in diminishing contamination of coasts and beaches and the destruction of bird life.

The Convention does not prohibit the discharge of waste oil entirely, but only within certain specified zones, and the countries which observe the convention represent only about one half of the world's tanker shipping, notable omissions being the U.S.A., U.S.S.R., Poland, Italy, Panama and Liberia. Though it is recognized that American tankers generally exercise a high standard of conduct in preventing oil discharges, nevertheless the signature of the American Government to the Convention is generally considered to be of the highest importance, as the influence on other countries to do likewise would be very great. The announcement made at the Copenhagen Conference by Mr. Lester A. Giles, Jr., American Humane Education Society, in association with Mr. John W. Mann, State Department, Washington, D.C., that an inter-departmental Committee had unanimously adopted a draft report for submission to the Secretary of State,\* recommending that the United States accept the 1954 Convention with reservations of a technical nature, was therefore received with acclamation.

Reports on the destruction of sea-birds from Canada and Newfoundland and from various European countries gave further evidence of the appalling loss of birds by slow and terrible death, which has now been going on for over 40 years. In the Netherlands it is estimated that there is a minimum of 20,000 and a maximum of perhaps 50,000 bird victims of oil pollution annually.

The general atmosphere of co-operation shown by everyone at the Conference was most stimulating, and again and again speakers emphasised the urgent need for support of the 1954 Convention, and expressed the view that total prohibition of discharge of waste oil into the sea is the only solution to the problem. To bring this about needs the support of public opinion in all maritime nations, and in this regard, Captain K. C. Angus, Marine Regulations Branch, Department of Transport, Canada queried whether as many as 5% of the population of any given country have even heard of the 1954 Convention. Captain Angus then added:

"Let us suppose for the moment that Canada is not a signatory to the 1954 Convention. In the prairie province of Manitoba, Mr. Smith decides to spend his annual holiday at one of the beautiful beaches of Nova Scotia, which he has seen advertised. He packs his family into his car and drives, almost 2,000 miles probably over U.S. highways, to Nova Scotia, and there finds his beautiful beach thoroughly covered with Bunker B.

"Now Mr. Smith will probably complain to his hotel manager; he may write a nasty letter to the local newspaper; he certainly will never return to this particular beach; and he will most likely denounce the place to his friends at home. But if Mr. Smith is unaware that an international effort is being made to alleviate this nuisance, then it may not occur to him to write to his elected representative to demand that his country participate. If the hotel owners and town fathers of this Nova Scotia town also are unaware, and the local yacht club and the local fishing fleet, then potential support for adherence to the 1954 Convention is being lost."

This statement is all too true, and it is of the greatest importance that the general public should be made aware of this menace to the seas.

Two resolutions were adopted at the Copenhagen Conference. The first urged: that the governments of countries which had not ratified the Convention of 1954 should do so; that further efforts should be made to impress upon governments and upon shipowners and ship's officers and crews the serious consequences arising from the discharge of oily wastes into the sea; that all necessary facilities be provided for the disposal of oily wastes in main ports and harbours; that technical research into means of avoiding discharges of oily waste into the sea be intensified and the results made widely known through I.M.C.O.; that with a view to achieving the aim of total avoidance

\*Letters may be addressed to the Secretary of State in Washington, D.C. asking for adoption of the Convention by our country.

of the discharge of persistent oils into the sea, the governments and I.M.C.O. should make preparations for holding a further inter-governmental conference as soon as possible.

The second resolution, though reiterating that total prohibition was the only effective solution of the problem, proposed in the meantime an extension of the prohibited zones for oil discharge in such areas as the Gulf of St. Lawrence, the Grand Banks of Newfoundland, and the eastern seaboard of North America, and also in the Baltic and North Seas.

Birds are the greatest sufferers from oil pollution and the International Council for Bird Preservation appeals to all humanitarian and natural history organisations to arouse public opinion to press that the seas of the world shall be made free from contamination by persistent oils.

### THE NSMR EDITORIAL

The editorial in the current issue of the Bulletin published by the National Society for Medical Research is devoted to an attack on the Animal Welfare Institute for its report (in Information Report Vol. 8, No. 3) on statements made at the National Conference on the Legal Environment of Medical Science. The editorial alleges in the following terms that the AWI report was not honest: "The AWI attacked the proposed amendments to the Nurenberg Principles and failed to mention that the amendments were not adopted. This is not honest reporting."

Since the official 114-page report on the Conference published by the NSMR itself fails to mention that the amendments were not adopted, the above seems a curious basis on which to accuse a 2-paragraph summary by the Institute of dishonesty.

Perhaps the NSMR editorial writer has not read the official report of the Conference, for his statement regarding animal experimentation by high school students is as confusing as that on human experimentation. "The Conference report," according to the editorial, "only included a prefatory statement that biological studies involving animals are an important means of illustrating biological principles . . . and there is nothing inherently wrong in properly supervised study of animals. The remainder of the report dealt with humane safeguards." In addition, the editorial states: "Actually, the discussion was devoted mostly to the humane safeguards that must surround the use of animals in the classroom."

What does the Conference Report actually state? On pages 37 and 38, the Chairman of the Animal Experimentation Session, summarizing the session, discusses high school animal experimentation, and the only statement which could possibly be construed as a "humane safeguard" is: "However, facilities in schools using animals must be adequate and the standards of care for all animals used should conform to those recommended by publications from various groups which have been concerned in this area. . ." He concludes with the comment: "The committee recommended that dogs, cats and primates not be used in student experiments, while the larger group in our sectional meeting felt that this restriction should not be imposed."

From a group which contains substantial numbers of persons who want high school youths to experiment on dogs, cats and monkeys, it is not surprising to find little indication in the Conference Report of discussion of humane safeguards. Two and a half pages are devoted to a summary of the animal experimentation discussion and, although it is encouraging to note that at least the recorder and the chairman do not agree on the use of large animals

by children, only one additional sentence refers to a "humane safeguard" namely: "The group also agreed that animals used for teaching purposes in the class room should not be given to students to be taken to their homes for care and keeping." These points are repeated in a summary on page 55.

The editorial makes it a point to stress that "the president of the AWI was an invited participant in the conference." However, as the invitation was issued for May 28th and 29th, although the Conference ended in the middle of the afternoon of the 28th, and as it took the form of a telegram delivered to the AWI office on the 27th when the Conference was already in session, participation of the AWI was necessarily limited to the second day when virtually all decisions had been firmly crystallized. As noted in the last Information Report, the effort to obtain official recommendation against painful experiments by or in the presence of children was totally unsuccessful, and though a considerable amount of time was indeed taken up on the morning of the 28th in discouraging and defeating this AWI proposal, no reference to it was made in the official Conference Report.

Points such as these are fundamentally unworthy of discussion. However, experience in the past proves that unless specific facts are made publicly available, false NSMR allegations against the AWI and its representatives are quite often believed and the hostility they are designed to inspire, effectively promoted.

The NSMR editorial concludes with the statement that "we keep getting the feeling that there is something more to the purpose of the AWI than is expressed in the prospectus. Otherwise we would not be catching the AWI with knife in hand so often."

The aims and actions of the AWI are clearly expressed in its publications, which include the bi-monthly Information Reports, annual reports, prospectus and free manuals given on request to scientific institutions, "Basic Care of Experimental Animals" and "Comfortable Quarters for Laboratory Animals". We have no secret, sinister aims. However, although the NSMR editorial says that "as far as official statements of policy are concerned the two organizations seem to be in near agreement," the truth is that there is a tremendous difference between the two. It is well exemplified by the concluding remarks of the NSMR attorney at the Conference when he indicated great satisfaction with the prediction that "in ten years, the value of animals used in animal experimentation may exceed even that of the present-day livestock industry."

The Animal Welfare Institute does not believe that promotion of the growth of the cash value of animal experimentation as an industry is good for anything: the country, our scientific advances, or our moral or physical strength. The NSMR has always supported limitless experimentation. The AWI supports humanely conducted experiments done by well-trained adults in properly equipped and supervised institutions. It considers the infliction of pain on animals as a serious thing, to be undertaken only when no other means of inquiry into important scientific questions are available. It believes that constant efforts should be made not to increase but to reduce the numbers of animals needed and used for scientific purposes which involve pain or distress.

### EIGHTH ANNUAL REPORT

The eighth annual report of the Institute is now available, free upon request, to readers of the Information Report.

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## ANIMAL CARE PANEL HEARS EXPERTS ON BRITISH LAW

This year's meeting of the Animal Care Panel held in Washington, October 29-31, was the best attended in the organization's history. There was more humane emphasis than ever before. Of major significance were the address presented by Major C. W. Hume, Secretary-General of the Universities Federation for Animal Welfare of Great Britain, and the statement by Dr. P. L. C. Carrier, Chief Inspector of the Home Office, who administers the British Cruelty to Animals Act which regulates animal experimentation in the United Kingdom.

Dr. Carrier spoke of the Pain Rules under the Act. "We won't allow animals to die in agony," he said.\* Dr. Carrier has a high regard for the effectiveness of the Act whose provisions are carried out by the Inspectorate, all of whom are medical men.

"The Act does not interfere with the progress of science," he stated categorically. "We only want to make sure animals do not go through unnecessary suffering." Dr. Carrier emphasized one of the most basic points of the Act in indicating that the Licensee is directly responsible for his work. He is given a license only if he is qualified to do the work.

Major Hume, referring to this individual licensing, said, "As regards the licensing of experimenters, there has been an effective acceptance of the British Association's recommendation that biological research ought to be done only by qualified scientists. Research consists of one part of experimentation with nine parts of hard thinking, and we do not believe that if an amateur dabbler does enough experiments and uses enough animals he will promote the advance of science, though naturally a research team will include men of various levels of ability working under expert supervision."

Major Hume pointed to the many great discoveries made in Britain by men working under the Pain Rules (some ten Nobel Prizes having been awarded for Physiology and Medicine in Britain), and he told of the extensive work of UFAW in the fields of laboratory animal husbandry and humane technique in experimentation.

Readers of the Information Report are familiar with the fact that UFAW is responsible for publication of *The UFAW Handbook on the Care and Management of Laboratory Animals*, edited by W. Lane-Petter and A. N. Worden (1957, \$9.80) and *The Principles of Humane Experimental Technique*, by W. M. S. Russell and R. L. Burch (1959, \$4.20). Both of these valuable books are sold in this country by the Animal Welfare Institute and the Animal Care Panel. They should be in every experimental laboratory.

A humane award was made at the ACP meeting by Mrs. A. S. Mike Monroney, Chairman of WARDS, to Dr. Robert Henthorne for his design of comfortable kennels with long runways for laboratory dogs. A tour of the newly completed kennel-runway quarters for dogs at Georgetown University was sponsored by WARDS for all attending the meetings. Dog-caging is still popular among those who are indifferent to the feelings of animals and who want to keep more than they have room for, but with Government funds available to provide half the cost of decent animal housing, unnecessarily close confinement which causes so much suffering to these naturally active animals must soon be considered obsolete.

## "RAIN OF DEATH"

The effect of the most "popular" new poisons on life—whether human or animal life—becomes increasingly serious with every passing year, since more millions of pounds of these highly toxic chlorinated hydrocarbons and organic phosphates are constantly being spread more widely and their effect is often cumulative.

The effect on animals is well summarized by a responsible zoologist who has studied the problem, Dr. George J. Wallace of Michigan State University: "The current widespread program poses the greatest threat that animal life in North America has ever faced—worse than deforestation, worse than illegal shooting, worse than drainage, drought, oil pollution, possibly worse than all these decimating factors combined. . . . If this and other pest-eradication programs are carried out as now projected, we shall have been witnesses, within a single decade, to a greater extermination of animal life than in all the previous years of man's history on earth." (*Readers Digest*, June, 1959)

In Long Island, New York, last year, citizens sought an injunction against mass spraying of DDT by airplane by the United States Department of Agriculture. Testifying on the danger to human health and life was Dr. Malcolm M. Hargraves of the Mayo Clinic. Following is a summary of his statements as reported by William Longgood

(Continued on Page 2)

The Florida State Department of Public Instruction has adopted the following rules concerning science teaching in the public schools:

- "1) Animals being observed by students should always be maintained in the maximum possible condition of health, comfort and well-being.
- "2) No vertebrate animal used for primary or secondary school teaching may be subjected to any experiment or procedure which interferes with its normal health or causes it pain or distress."

The following article by the Chairman of the Animal Welfare Committee of the Florida Federation of Humane Societies gives a first-hand report on the fine cooperation which has led to a positive program of humane science teaching for the State.

### Humane Science Teaching

By MABEL E. CRAFTS

Chairman, Animal Welfare Committee  
Florida Federation of Humane Societies

There is a way to offset the importuning of the limited number of scientists who bring pressure to bear on the science teachers of the country to use living vertebrate animals in the lower schools for experimental purposes. In Florida we have found that the school administrators are not at all convinced that such experimentation is a proper activity for high school and elementary school pupils. In fact, they feel that such use of animals is contrary to the ethical and character-building education which they strive to provide.

Two years ago our local society received a report that a high school boy was conducting a "teacher-approved" experiment to find out how much arsenic it took to kill a rabbit. Outraged children told their parents and they

(Continued on Page 3)

\*The Pain Rules state that: a) If an animal at any time during the said experiments is found to be suffering pain which is either severe or is likely to endure, and if the main result of the experiment has been attained, the animal shall forthwith be painlessly killed; b) If an animal at any time during any of the said experiments is found to be suffering severe pain which is likely to endure, such animal shall forthwith be painlessly killed; c) If an animal appears to an Inspector to be suffering considerable pain, and if such Inspector directs such animal to be destroyed, it shall forthwith be painlessly killed.

in the *American Mercury*, July, 1958. "Dr. Hargraves testified that he was positive that DDT and its solvents cause leukemia, aplastic anemia, Hodgkins disease, jaundice and other blood disorders, many of them fatal. Of more than 200 people he has treated for those maladies during the last four or five years, he said, all showed exposure to chlorinated hydrocarbons. Dozens of them are now dead, he added. He emphasized that, while he spoke for himself as an individual, the majority of hematologists he works with at the Mayo Clinic share his beliefs about the danger of DDT. . . Dr. Hargraves was not the first to implicate DDT as a cause of cancer. Dr. W. C. Hueper, head of environmental cancer research of the National Cancer Institute, Department of Health, Education and Welfare, has listed as carcinogens, the 'chlorinated hydrocarbon pesticides, especially aramite and DDT.'"

In "Public Health Aspects of the New Insecticides" (*American Journal of Digestive Disease*, November 1953) Dr. Morton S. Biskind includes a bibliography of 119 scientific papers on the subject. The great amount of careful scientific study showing the danger to human health has not, however, brought about any reduction in the use of the poisons. On the contrary, the amount used and degree of toxicity are constantly going up instead of down.

One of the biggest programs for spreading a chlorinated hydrocarbon, in this case heptachlor, is in the fire ant "eradication" program for which Congress voted an appropriation of \$2,400,000 for the coming year, despite the protests of conservation agencies. The State of Alabama, however, has refused to accept the program this year. In 1958 State Conservation Department officials there found that up to 75% of all wildlife might be killed if the program continued. Other Southern States, however, will continue despite reports such as the following by Congressman Lee Metcalf of Montana (*Congressional Record*, March 18, 1959): "In two areas that were treated with heptachlor for eradication of the imported fire ant, birds were reduced 75 to 85%—quail and rabbit populations were virtually wiped out. Fire ant eradication work in Monroeville, Alabama, last July was reported in the *Montgomery Journal* to have resulted in the deaths of hundreds of chickens, more than 50 dogs, many cats, some birds and an undetermined number of turkeys, ducks and squirrels. Veterinarian O. L. Poitevint of Climax, Ga., has stated that the deaths of upwards to 100 head of cattle and large numbers of chickens, turkeys, goats and sheep, and reproductive failure in 100 to 150 brood sows, resulted from fire ant treatment around that community."

The reproductive failure mentioned above is characteristic of the effects of sublethal doses of this type of poison. For example, in an article by Dr. James B. DeWitt, Fish and Wildlife Service chemist, (*Wildlife in North Carolina*, September 1957), the author states in summarizing experiments at the Patuxent Wildlife Research Refuge: "In no case has it been possible to get reproduction from quail or pheasants which had been reared and maintained on diets containing insecticides, if the parents of these birds also had received insecticides in the reproduction diet." In other words, after the second generation, there are no more baby quail or baby pheasants.

Our national bird, the bald eagle, is apparently succumbing to this same form of decimation. Mr. Charles Broley, the leading expert on eagles, is reported (*New York Times*, September 13, 1958) as stating that "his observations had convinced him that 80 per cent of Florida's bald eagles were sterile. He noted that the eagles lived largely on fish. In a recent issue of *Audubon Magazine* he quoted the late Dr. Herbert R. Mills, a bacteriologist, as having found 'a large residue of DDT in many fish found dead in Tampa (Fla.) Bay.' Mr. Broley said that in 1940 there were 500 active nests in Florida; now the total is probably only eighty."

There are other ways, too, in which these persistent poisons carry on their fight against living things long after their original application. Rachel Carson, author of "The Sea Around Us", wrote in the *Washington Post*, April 10, 1959: "During the past 15 years, the use of highly poisonous hydrocarbons and of organic phosphates allied to the nerve gases of chemical warfare has built up from small beginnings to what a noted British ecologist recently called 'an amazing rain of death upon the surface of the earth.' Most of these chemicals leave long-persisting residues on

vegetation, in soils and even in the bodies of earthworms and other organisms on which birds depend for food. The key to the decimation of the robins which in some parts of the country already amounts to virtual extinction is their reliance on earthworms as food. The sprayed leaves with their load of poison eventually fall to become part of the leaf litter of the soil; earthworms acquire and store the poisons through feeding on the leaves; the following spring the returning robins feed on the worms. As few as 11 such earthworms are a lethal dose, a fact confirmed by careful research in Illinois."

While birds and mammals are succumbing to the poisons designed to kill insects, what is happening to the insects themselves? Vast numbers of them have been killed, of course. However, insects reproduce on a scale and with a speed unknown to warm-blooded creatures. They can develop new strains within a very brief space of time, and they have done so. In "Insecticides, Boon or Bane" by Paul F. Springer, Fish and Wildlife Service biologist (*Audubon Magazine*, summer 1956) this passage appears: "*Insect Resistance to Chemicals*. After World War II, DDT was by far the most popular insecticide and was considered a panacea for insect control. But the insects were not to be counted out so soon. In an amazingly short time, resistant populations of certain species began to appear. Some were able to withstand dosages of DDT 1,000 times greater than those originally needed to kill their ancestors. Now, in many parts of the country, such pests as houseflies, mosquitoes, roaches, body lice, fleas, bedbugs, lygus bugs on alfalfa, saltmarsh caterpillars, imported cabbage worms, cabbage loopers and codling moths are impossible to control economically with DDT. When resistance of these insects was first noted, it seemed a simple matter of turning to other insecticides for their control. But this didn't always work. While substitutes sometimes proved temporarily effective, it was found that resistance to poisoning by DDT frequently meant they were resistant to other chlorinated hydrocarbons or that resistance to these alternate compounds quickly developed. Hence, there is a need for an entirely different group of control insecticides which accounts for present increasing interest in the organic phosphates."

The organic phosphates are indeed interesting. As noted in the article by William F. Longgood quoted earlier, "Some of the organic phosphates are so lethal that a single drop in a person's eye will cause death within seconds."

At least one manufacturer of chemicals has recognized the biological facts. Mr. William T. Thompson, President of the Thompson Chemical Company of St. Louis and Los Angeles, has stated: "We have decided to withdraw entirely from the production, distribution and research of the presently known agricultural insecticides. A twelve-year study has convinced us that the currently known and used broad spectrum insecticides and their wide scale application to agricultural crops—although giving temporary control and temporarily increased yields — are at best palliative, and perhaps will prove dangerous and uneconomic in the long run.

"The growing number of insect pests of economic importance that are becoming resistant to presently used agricultural insecticides demonstrates a serious inherent danger in wide-scale use. The imbalance of the fauna population caused by the destruction of natural predators and parasites (thus allowing the uninhibited development of the insect pest) is further proof to us of the unsoundness of the current chemical insecticides. This can only result in rapid and dynamic development of the insect pest from the few not controlled by the application, but can easily cause heretofore unimportant insects to increase to the status of economic pests, once the predator-parasite balance has been upset.

"The ingestion of presently employed insecticide residues by humans and other warm-blooded animals is a correlative problem of a *highly serious nature*."

These intelligent thoughts are the exception rather than the rule, however; most of the manufacturers are determined to defend themselves and their products. An article in the *New York Times*, November 22, 1959, headed "PESTICIDE SCARE WORRIES MAKERS, Chemicals Producers Fear Bad Public Reaction to Cranberry Incident", states in part: "Leaders of the volatile

agricultural chemical industry also are expressing deep concern. Some fear a possible reaction against the increasing application of pesticides and other chemicals in agriculture that eventually could cut into sales.

"It was an allegedly harmful residue from a chemical weed killer, aminotriazole, that prompted action with regard to cranberries.

"Some industry officials also fear the possibility of still tighter Government regulations governing the manufacture and marketing of agricultural chemicals.

"In order to meet Government requirements we must now spend up to \$2,000,000 in research over a period of up to five years before a new product can be marketed," said one top official of an agricultural chemical company.

"We believe products now on the market are thoroughly safe and that any further restrictions would make our research costs prohibitive."

It is difficult to guess just what this spokesman means by the phrase "thoroughly safe."

The American Medical Association Council on Pharmacy and Chemistry states that "it is not reasonable to expect that human beings can avoid injury if they are exposed . . . year after year to a toxic agent in atmospheric concentrations that kill insects in a few hours." Clearly, it is fantastic to call such poisons "thoroughly safe". They are killing birds by the thousand, fish by the ton. Many of them have been shown to be carcinogenic when taken over a period of time in sublethal doses. The Food and Drug Administration has denied any tolerance rating to many of them, including heptachlor of fire ant fame and also DDT. Nevertheless, DDT has been found to be present in a high percentage of the milk tested for its presence, and the average American has DDT stored in his fat.

It is estimated (Congressman Lee Metcalf, *Congressional Record*, Sept. 2, 1959) that "at least 3 billion pounds of these chemicals were sprayed over more than 70 million acres of our crop and timberland to kill insects, weeds and plant diseases last year."

The 86th Congress has appropriated \$2,565,000 for study of the effects of pesticides on fish and wild life. It also passed an amendment to the Pure Food and Drug Law which prohibits sale of food containing any residues of any carcinogenic substance. These are steps in the right direction, but they have not stopped plans to continue the huge heptachlor dispersal in the South which will certainly kill birds and animals on a tremendous scale. Effective action to stop unnecessary dissemination of poison is urgently needed for the protection of our wild life, our domestic animals and ourselves.

### Humane Science Teaching

(Continued from Page 1)

in turn called the Humane Society. Investigation showed that the principal was unaware that any animals had been brought into the building. He immediately stopped this type of teaching. Further conferences with the County Supervisor of Education initiated a directive that no live animals be used for any experiments causing pain or distress. Also, the shocked County Solicitor when told of the arsenic experiment stated that if he were informed of any such experiments in the schools, he would take action and stop them.

The Florida Federation of Humane Societies has an Animal Welfare Committee made up of leading citizens. Among them are three men in various fields of medicine: a pathologist connected with a large county hospital, a city health officer who is also on the Education Committee of the local Chamber of Commerce, and a long practicing veterinarian. This committee has been instrumental in improving conditions for animals in the State over a period of years.

Last Fall, the Animal Welfare Institute discussed a bulletin published and distributed by the National Science Teachers Association, entitled "Will Cancer Be Conquered in the High School Laboratory?" Realizing that science teachers would be bombarded with similar material encouraging the use of live animals for painful and distressing experiments, the Chairman of the Committee obtained copies of the brochure and sent them along with the significant AWI Information Report to all Animal Welfare Committee members to get their reaction to such school projects.

All members felt that children in the lower schools should be protected from this type of instruction. The same material was sent to school administrators. Conferences with the Supervisor of Education and the Supervisors of Secondary and Elementary Schools—all of whom were new since the two-year-old incident—again produced affirmative results. Principals were instructed that no painful experiments might be conducted in the Elementary Schools. At the science workshop preceding the opening of school, the Supervisor of Secondary Education discussed the proper and improper use of animals in classes. Live vertebrates could be used for observation, not for painful experiments. One of our medical committee members said he would bring up the subject at a meeting of the Chamber of Commerce Education Committee when it was relevant.

As one county is only a small fraction of the state, the Chairman wrote the State Superintendent of Public Instruction, Mr. Thomas D. Bailey, and requested that a directive be issued to all school administrators in the State that vertebrate animals not be used for painful or distressing experiments. Mr. Bailey responded with a most sympathetic letter indicating his interest in finding a way to provide the finest of science teaching without the devastating effects of live animal experimentation. He asked for certain specific recommendations from the State Committee and stated that the State Department of Public Instruction was preparing a Science Handbook for the guidance of all the science teachers of the state. He said he would reserve space in the Handbook for recommendations regarding the use of animals, prepared by the committee. Questions which he felt should be answered in the material to be printed were referred to our three medical members and also to the Animal Welfare Institute, the American Humane Association and the Humane Society of the United States. The answers from these six were all harmonious, as they all deplored the use of animals for any painful or distressing experiments. These answers were all forwarded to Mr. Bailey for consideration by his staff and the editors of the Handbook. (As the numerous reasons why humane experiments have been banned by humane scientists, psychologists, and psychiatrists have been published in these AWI Information Reports, they will not be repeated here.)

The Chairman of the Animal Welfare Committee attended the annual Convention of the HSUS in New York and heard a talk by Professor James T. Mehorter of the University of Vermont on the bad psychological effects of inhumane experiments on children performing or observing them. While in New York, with the assistance of the staff of the AWI, suggested material for the Science Handbook was prepared and, with a copy of Professor Mehorter's talk, forwarded to Mr. Bailey. Subsequently, through Mr. Bailey's arrangements, a conference was held with the State Supervisor of Science Education and staff member concerned with curriculum and textbooks. They stated that the Department was one hundred percent in favor of the recommendations of the Committee and that they were wholly in accord with the ideas expressed by Professor Mehorter. The material prepared for inclusion in the Science Handbook was entirely acceptable. However, as there would be a lapse of time before the Handbook would be completed and published, the Supervisor of Science Education said that he would send the material as a news item to the Bulletins of the Florida Association of Science Teachers and the Florida Foundation for Future Scientists.

Both men thanked the Committee for its backing in promoting the ethical type of teaching they wished to provide the children of Florida. They were much interested in the forthcoming booklet of humane experiments, using unicellular life, plants and inanimate substances, to be published by the AWI for free distribution to biology teachers. They had at hand a pile of suggested experiments sent by a science group. Some were brutal; others using lower forms of life or inanimate substance were humane. He proposed to select the acceptable ones and send them to the AWI for possible inclusion in the above booklet.

Our pathologist committee member had suggested workshops for biology teachers, at which time the proper use of animals in the classroom could be discussed, pointing

out the value of accurate observation without interfering with their living habits. Acceptable humane experiments could then be developed in discussion. The Science Supervisor was particularly interested in this recommendation and hopes to develop it on a statewide basis and use attendance as a means of honoring outstanding teachers.

The handbook material follows:

### Recommendations on Animals in Schools

"Kindness to animals is a required study in the public schools of the State of Florida. Whenever animals are brought to classrooms, their treatment must be in accord with the principles of kindness and consideration established by this directive.

"A serious conflict arises if science teachers seek to introduce painful experiments on vertebrate animals in the classroom or to encourage students to do such experiments for science fairs. A new ruling of the 1960 Science Achievement Awards for Students states: 'Project reports giving evidence either of unsafe procedures in experimentation with rockets or of cruel and inhumane treatment of animals will not be considered for awards in this program.'

"This ruling is the result of widespread protests against cruel experiments or demonstrations done by or in the presence of elementary and secondary school students. These protests have included many from distinguished scientific research workers.

"Dr. Chauncey D. Leake, Dean of the College of Medicine at Ohio State University and President-elect of the American Association for the Advancement of Science, recently wrote: 'It seems to me that it is wise to avoid getting our youngsters so enthused over biological sciences that they are anxious to undertake extensive animal experimentation without the background, the experience, the judgment, or the wisdom, that is necessary in handling animals appropriately for complicated biological experimentation. In other words, I think we had better continue to learn the hard way: there is plenty of biology to be gotten from a study of unicellular organisms that can be readily obtained in any high school laboratory, and handled and followed with skill and convenience. We are apt to get into trouble using animals.'

"Professor James E. Mehorter, of the University of Vermont Schools of Education and Medicine, states in a recent paper on the subject: 'I am profoundly concerned with the psychological effects that this sort of public school "experimentation" has on the developing child.' Indicating his belief that it 'will contribute significantly to the mounting incidence of mental illness in our young people', he concludes, '. . . it is imperative that we endeavor to put a stop to the callous and educationally pointless use of animals in the school. Under no conditions can we afford to have our children conditioned to apathy and indifference toward any form of pain and suffering.'

"Stimulation of interest in biology need not and should not conflict with the mental health and character development of the student. Animals may be observed in their natural environment, and some may be kept in comfortable quarters in the classroom for observation. Such animals should always be kept in the best possible state of health and well-being and should be provided with roomy cages in which they can obtain adequate exercise. They should have a comfortable nest-box or other suitable resting place, as well as a constant supply of fresh water and a good, varied diet.

"When experiments on life-processes are to be done, the use of one-celled organisms as suggested by Dr.

Leake above, or of plants, can be substituted. Preserved specimens and slides are useful teaching supplements in this area. Teachers who wish to obtain suggestions on humane biology projects may obtain information from the Animal Welfare Institute, 22 East 17th Street, New York City, which has in preparation a booklet for this purpose to be made available free to teachers on request. An illustrated manual on the care of animals in the classroom and elsewhere, "First Aid and Care of Small Animals", is also available free to teachers from the Institute.

"Two simple rules on the treatment of animals in classrooms or other teaching projects should be observed by all teachers and students:

"1) Animals being observed by students should always be maintained in the maximum possible condition of health, comfort, and well-being.

"2) No vertebrate animal used for primary or secondary school teaching may be subjected to any experiment or procedure which interferes with its normal health or causes it pain or distress."

### CRUEL SPORT CONDEMNED BY ALABAMA MINISTERS

Although fights between animals or between men and animals presented as entertainment are for the most part, like public executions, relegated to the past, the cruel 'coon-on-the-log' contests still persist in some rural areas. A raccoon is chained to a log which is set adrift in a pond, and dogs are sent out to fight the captive animal, whose intelligence, agility and sharp teeth painfully prolong the seemingly uneven battles.

This so-called sport deserves the same fate as the Roman circuses, exhibitions with a similarly sadistic appeal which owed their extinction to the Christian religion.

It is encouraging to read the brief report of the Ministerial Association of the City and County of Tuscaloosa, Alabama and the resolution which the Association adopted on October 26, 1959. The report states: "An appeal was sent to the President of the Ministerial Association from the State President of the Humane Society September 4, 1959, requesting an investigation of the 'coon-on-the-log' contest to be held on Labor Day at Smalley Lake. In response to this appeal, an investigation was arranged through an eye witness, who has lived in the county for many years. He reported as follows: 'The 'coon-on-the-log' contest was a most inhumane, cruel, brutal and ruthless affair. Many of the large group of people present expressed condemnation. Prizes were given, in money, to the owners of the dogs, inflicting great torture to the raccoons.' . . ."

The resolution is as follows:

"Whereas Christian ethics preclude unnecessary cruelty to animals;

"Whereas 'torment and torture' of animals is prohibited by Alabama law;

"And whereas man's restraint of one animal so that it may be attacked by another—such as the 'coon-on-the-log' contest—is counter to the tradition of fair play and the teaching of our ministries and thus has a degrading effect on the beholder,

"Be it, therefore, resolved that the Ministerial Association of City and County of Tuscaloosa does condemn such unreasonable exhibition of animal torture, cruelty and suffering, and in no respect do we approve or condone.

The Rev. Joseph P. Boone, *Pres.*

The Rev. E. L. Shigley, Jr., *Vice Pres.*

The Rev. H. T. Hammer, *Secy.*"

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