The group then spent the remainder of the morning in the laboratory working on identification characters of mosquitoes.

At 1:30 p.m., the Conference re-convened in Agriculture Hall.

Campbell: We will now have a paper on "Changes in Legislation Affecting Mosquito Control Operations" by Harold F. Gray.

Gray: Two years ago the Association organized a Legislative Committee, which at our meeting last year reported on desirable changes in the laws under which we operate. The committee members had bills introduced into the 1941 State Legislature, and by working cooperatively according to a general plan agreed to, we were able to get the several amendments passed without appreciable difficulty, and they were signed by the Governor and went into effect September 13, 1941. The original amendments were designed to enable districts to operate outside of their boundaries where necessary, to make the power to inspect specific instead of implied, to prevent interference with or damage to our work, and in the case of pest abatement districts, to provide an optional basis of assessment.

Without consultation with us the Marin District, which seems to prefer to play a lone hand in all matters relating to mosquito control, had introduced a separate amendment relating to the method of defraying expenses of Trustees, and the method of withdrawal of funds. As there was no objection, their bill was tacked onto our bill in the Senate.

I wish to thank all the members who worked on this legislation, primarily by contacting their own Assemblymen and Senators. While all pitched in and helped, Chester Robinson and Fred Hayes were particularly helpful.

CHANGES IN LEGISLATION AFFECTING LIOSQUITO CONTROL OPERATIONS

bу

Harold F. Gray, Engineer, Alameda County Mosquito Abatement District

The 1941 Legislature of California passed certain acts which amend various sections of the Health and Safety Code relating to mosquito abatement districts and to pest abatement districts. In addition, at least two general

statutes were passed which have relation to the work of such districts.

## MOSQUITO ABATEMENT DISTRICTS

The act which amends the mosquito abatement district law is Chapter 314, Statutes of 1941. The original sections of the Health and Safety Code affected by this act are shown in the left hand column below, and opposite in the right hand column are these sections as now amended. Section numbers refer to Health and Safety Code section numbers. Section I of Chapter 314 amends Section 2248 of the Health and Safety Code as follows:

2248. The members of the district board shall serve without compensation; but the necessary expenses of each member for actual travelling in connection with meetings or business of the board shall be allowed and paid.

2248. The members of the district board shall serve without compensation; but the necessary expenses of each member for actual travelling in connection with meetings or business of the board shall be allowed and paid. In lieu of expenses, the district board may by resolution provide for the allowance and payment to each member of the board of a sum not exceeding five dollars (\$5.00) per month for expenses incurred in attending business meetings of the board.

This amendment provides an alternate method of compensating members of the Board of Trustees for travelling expenses in attending business meetings of the Board. Instead of filing an itemized statement of expenses, board members may receive in lieu of such actual incurred expenses a monthly allowance of not to exceed \$5.00; provided, that the Board of Trustees must first, by formal resolution, entered in the minutes, authorize this method of defraying expenses of members of the board for actual attendance at meetings.

Section 2 of Chapter 314 amends Section 2270 of the Health and Safety Code as follows:

2270. The district board may
(a) Take all necessary or
proper steps for the
extermination of mosquitoes, flies, or other
insects in the district.

(b) Subject to the paramount control of the county or city in which they exist, abate as nuisances all stagnant pools of water and other breeding places for mosquitoes, flies, and other insects in the district.

- (c) Purchase such supplies and materials and employ such labor as may be necessary or proper in furtherance of the objects of this chapter.
- (d) If necessary or proper, in the furtherance of the objects of this chapter, build, construct, repair, and maintain, necessary levees, cuts, canals, or channels upon any land in the district, and acquire by purchase, condemnation, or by other lawful means, in the name of the district, any lands, rights of way, easements, property or material necessary for any of these purposes.

(a) Take all necessary or proper steps for the extermination of mosquitoes, flies, or other insects either in the district or in territory not in the district but so

2270. The district board may:

the district that mosquitoes, flies, or other insects from such territory migrate into the

situated with respect to

district.

- (b) Subject to the paramount control of the county or city in which they exist, abate as nuisances all stagmant pools of water and other breeding places for mosquitoes, flies or other insects either in the district or in territory not in the district but so situated with respect to the district that mosquitoes, flies and other insects from such territory migrate into the district.
- (c) Purchase such supplies and materials, employ such personnel and contract for such services as may be necessary or proper in furtherance of the objects of this chapter.
- (d) If necessary or proper, in furtherance of the objects of this chapter, build, construct, repair, and maintain, necessary dykes, levees, cuts, canals, or ditches upon any land, and acquire by purchase, condemnation, or by other lawful means, in the name of the district, any lands, rights of way, easements, property or material necessary for any of these purposes.

- (e) Make contracts to indemnify or compensate any
  owner of land or other
  property for any injury or damage necessarily caused by the use
  or taking of property for
  levees, cuts, canals or
  channels.
- (f) Do any and all things necessary or incident to the powers granted by, and to carry out the objects specified in this chapter.
- (e) Make contracts to indemnify or compensate any owner of land or other property for any injury or damage necessarily caused by the use or taking of property for dykes, levees, cuts, canals or ditches.
- (f) Enter upon without hindrance any lands, within or without the district, for the purpose of inspection to ascertain whether breeding places of mosquitoes, flies or other insects exist upon such lands; or to abate public nuisances in accordance with this article: or to ascertain if notices to abate the breeding of mosquitoes, flies or other insects upon such lands have been complied with; or to treat with oil or other larvicidal material any breeding places of mosquitoes, flies or other insects upon such lands.
- (g) Sell or lease any land, rights of way, easements, property or material acquired by the district.

Every sale of real property pursuant to this subdivision shall be made to the highest bidder at public auction after five days notice given pursuant to Section 2204 of this code, and at such place within the district as the district board shall specify.

(h) Do any and all things necessary or incident to the powers granted by, and to carry out the objects specified in, this chapter. These amendments provide, first, that the district may operate outside of its official boundaries if it is necessary to do so in order to adequately protect the inhabitants of the district from mosquito annoyance; second, confers the right to inspect in specific terms, instead of by inference as heretofore; third, provides for the sale of district property where desirable or no longer required. It should be noted that the power to inspect is limited to lands; it does not confer the power to inspect the interior of dwellings.

Section 3 of Chapter 314 amends Section 2274 of the Health and Safety Code as follows:

2274. Whenever a nuisance specified in this chapter exists upon any property in a district, the district board may in writing notify the record owner, or person in charge or in possession of the property, of the existence of the nuisance.

2274. Whenever a nuisance specified in this chapter exists upon any property either in the district or in territory not in the district but so situated with respect to the district that mosquitoes, flies or other insects from such territory migrate into the district, the district board may in writing notify the record owner, or person in charge or in possession of the property, of the existence of the nuisance.

This amendment makes it possible for districts to serve notices to abate mosquito breeding nuisances upon owners or occupants of property outside the district as well as within the district, and under the provisions of the related sections 2271-2273 and 2275-2289 of the Health and Safety Code proceed to abate the nuisance either under the method prescribed in said sections, or by any other method prescribed by law, and also to require that adequate steps be taken to prevent a recurrence of such breeding.

It is recommended that this section by used with especial care, and that definite proof be available that mosquitoes from breeding places outside of the district do actually migrate into the district in sufficient numbers to constitute a public nuisance, that is, a nuisance affecting a considerable number of people. It is probable that the possession of this power, if tactfully explained, may be sufficient in practically all cases to obtain abatement without actually proceeding to legal action.

Section 4 of Chapter 314 adds a new Section 2292 to the Health and Safety Code, as follows:

> 2292. Any person who obstructs, hinders or interferes with the entry upon any land mentioned in this article of any officer or employee of the district in the performance of his duty, and any person who obstructs, interferes with, molests, or damages any work performed by the district, is guilty of a misdemeanor.

The purpose of this new section is to provide a more direct method of handling the occasional cases where entry is refused, or where malicious damage to district work is done. It is recommended that this section be used with discretion, and where possible as a preventive of obstreperous interference, rather than as a punitive measure.

Section 5 of Chapter 314 amends Section 2312 of the Health and Safety Code to read as follows:

2312. The funds shall only 2312. treasury depository upon the warrant of the district board signed by its president or acting president, and countersigned by its secretary.

The funds shall only be be withdrawn from the county withdrawn from the county treasury depository upon the warrant of the district board signed by its president or acting president, and countersigned by its secretary. However, if the county in which the district is situated has adopted a requisition system covering the withdrawal of funds for the purchase of services or supplies, the district board may, by resolution, adopt such system and make withdrawals in accordance therewith.

This amendment makes it possible for districts situated in counties which have a requisition system for withdrawal of funds from the treasury, to comply with the practice of that county. At the present time, only a few districts would be affected by this amendment.

## PEST ABATELENT DISTRICTS

The law relating to Pest Abatement Districts (Chapter 8, Division III, Health and Safety Code), has been amended by three separate acts of the 1941 Legislature, respectively Chapters 333, 334 and 361. The original sections of the Code are shown on the left, with the amended sections on the right, and are placed in the order of the code sections, irrespective of their order in the 1941 acts.

(Added new section)

2803. Any person who restrains, hinders or threatens any officer or employee of a district in the performance of his duties as such officer or employee is guilty of a misdemeanor.

This section is similar to the first part of the new section 2292 of the mosquito abatement district law.

(Added new section)

2822.5. The petition shall state the basis on which the property of the district shall be taxed for district purposes, which shall be either on the basis of area or on that basis of assessed valuation.

See remarks concerning Sections 287, 2871.5 and 2871.7, which also comment on this section.

2853. The district board may: 2853. The district board may: (a) Purchase supplies and (a) Unchanged. other personal property.

- (b) Employ necessary labor. (b) Unchanged.
- (c) Acquire by purchase, con- (c) Unchanged. demnation or otherwise, in the name of the district, any lands, rights of way, easements, or other real property necessary for the district.
- (d) Make contracts to indemnify or compensate any owner of land or other property for any injury or damage caused by the exercise of the powers conferred by this

(d) Unchanged.

chapter or of powers incident thereto.

- (e) Sue and be sued.
- (f) Do everything necessary to carry out the powers conferred by this chapter and carry out the objects of the formation of the district.
- (e) Unchanged.
- (f) Enter upon any property in the district for the purpose of inspection and control work and for the same purpose may enter upon property adjacent to the district which is a breeding place or is susceptible of being a breeding place from which infestation may spread into the district.
- (g) Do everything necessary to carry out the purposes conferred by this chapter and carry out the objects of the formation of the district.

The added sub-section (f) in the amended law confers the power to inspect, within or without (adjacent to) the district.

2871. The board of supervisors shall levy, annually, a tax sufficient to raise the amount required for the purposes of the district. The rate shall be uniform and based on area of land. regardless of assessed valuation. The county assessor of each county shall prepare an assessment roll showing the names and addresses and the acreage owned by each person owning land within a district, which roll shall be the basis for the tax pro-If the rate vided for herein. has been fixed by the organization petition, the rate fixed by the board shall not exceed that rate.

2871. The board of supervisors shall levy annually, a tax sufficient to raise the amount required for the purposes of the district. If the rate has been fixed by the organization petition, the rate fixed by the board shall not exceed that rate.

(Added new section)

2871.5. If the petition states that the property shall be taxed on the basis of area, the rate shall be uniform and based on area of land, regardless of assessed valuation. The county assessor of each county shall prepare an assessment roll showing the names and addresses and the acreage owned by each person owning land within a district, which roll shall be the basis for the tax provided for herein.

(Added new section)

2871.7. If the petition states that the property shall be taxed on the basis of assessed valuation, the board shall determine the rate of the tax by deducting 15 per cent from the total assessed value of the property in the district appearing upon the assessment roll and then dividing the amount required to be raised by the remainder of the assessed value.

In the original pest abatement district act, Section 2871 required the assessment base for taxes to be assessed valuation only. In 1939 this was changed (Chap. 449, Stats. 1939) to an assessment base of area only. The foregoing sections, together with Sec. 2822.5 previously noted, permit the basis of taxation to be either assessed valuation, or area, as the petitioners of the district desire, and the added new section 2875 following permits the citizens of the district to change the basis of taxation, by petition and hearing, at any time after the formation of the district.

(Added new section)

2875. Upon application of registered voters within district equal to the number required for a petition to initiate proceedings for the organization of the district, and after notice published as prescribed for notice of hearing on a petition for organization and a hearing on the

matter, the board may change the basis upon which the property of the district shall be taxed from one permitted basis to the other. Thereafter in ensuing tax periods the basis as changed shall be the basis of taxation for the district.

(Added new section)

2901. At any time after the incorporation of a district, upon application of such persons as could have initiated proceedings for the formation of a district composed of the land sought to be annexed, land contiguous to the district may be annexed by the board of supervisors upon like procedure, notice and hearing as provided for formation of a district.

This section provides an alternate method of annexation, supplementing the previous procedure (Sec. 2900) by petition of adjacent property owners only. It makes possible an annexation of territory over the objection of a minority property interest.

## GENERAL LAWS RELATING TO DISTRICTS

Two new general laws of the 1941 Legislature are also of interest to us.

The first is Chapter 739, Statutes of 1941, which makes available a simple procedure for the dissolution of any district which has ceased to function, and is no longer required.

If such a district has no debts or bonds, and has not exercised its functions, then either the county assessor or county tax collector may make a written request to the Board of Supervisors to have such district dissolved. If the Board of Supervisors approve, then the District Attorney takes the dissolution procedure into the Superior Court.

It should be noted that this method is applicable only to those districts whose taxes are assessed and/or collected by county officials.

Probably the only mosquito abatement district which could be affected by this act at the present time is the Fair Oaks District in Sacramento County, which I understand has been inactive for many years.

The other general law is Chapter 465, Statutes of 1941, which provides that two or more districts, of any type, may jointly by contract exercise any common power or powers. Cities and counties have heretofore possessed and exercised this right.

This act would make it possible for two or more mosquito abatement districts to join together in their operations, so as to work more effectively. For example, it would be possible for the inadequately financed, small districts in Shasta County to join with the Redding District, and by pooling their funds, equipment and resources do a much more effective job of mosquito control than has been possible individually. That combination appears to be the most obvious and advisable, but others may be found to be desirable, for example, the Three-Cities, Pulgas and Matadero districts.

Campbell: Fred Hayes was programmed to give a paper this afternoon on the effect of priorities and national defense on mosquito control operations. However, he had to return to Bakersfield where he is to be installed tonight as Master of his Masonic Lodge, so I will ask Mr. Gray if he has any information on this matter.

Gray: I have a substitute paper to present, but in regard to priorities, all local governmental agencies are entitled to an "A-10" priorities rating on all materials for ordinary operations. On orders for such materials you should type or stamp the following:

Material for Maintenance, Repair or Operating Supplies. Rating A-10 under Preference Rating Order P-100, with the terms of which I am familiar.

Mosquito Abatement District

Superintendent

The above certificate must be signed, of course.

For capital equipment and certain specified materials, a separate request on Form PD-1 of the OFM must be prepared and filed. This procedure is rather complex

and I shall not attempt to describe it, as I don't understand its complexities. Instead, I will present Mr. Thomas F. Kelley, a graduate student in the Division of Entomology and Parasitology here at the University, who has recently completed a report on a survey of mosquito breeding in certain cemeteries in Alameda County. This report was prepared for the Alameda County Losquito Abatement District by Mr. Kelley, with the assistance of Mr. Pedro Galinda, also a graduate student, under the direction of Professor Herms and myself.

MOSQUITO BRHEDING IN CERTAIN CENETERIES
EN ALANEDA COUNTY? CALIFORNIA

bу

Thomas F. Kelley,
Division of Entomology and Parasitology,
College of Agriculture,
Berkeley

The purpose of this investigation was to ascertain the extent of mosquito breeding within cemeteries. For a number of years the Alameda County Mosquito Abatement District, for which District this study was conducted, had been aware that there was an appreciable amount of mosquito breeding in certain cemeteries in the District, but the resulting nuisance was relatively minor. Therefore, in view of the type of personal sentiment involved, and the possibility of arousing violent resentment and prejudice, the District forebore taking any drastic steps to abate mosquito breeding in the cemeteries, though it did receive helpful cooperation from at least one cemetery.

Recently conditions have changed appreciably, and a reconsideration of past policy has been necessary. Some of the species of mosquitoes breeding in cemeteries are probable vectors of encephalitis, and with the establishment of large military posts and war industries in the District, it was decided that the situation must be appraised as a possible danger to the nation's war effort. The first step decided on was a survey of the species of mosquitoes breeding in cemeteries, their relative numbers, and the types of breeding places. This part of the work, here reported, was performed by the speaker with the assistance of Mr. Pedro Galinda of this Division.

Three typical cemeteries were selected for study, in this paper being designated as A, B and C. Cemeteries A and B are located in the heart of a large city (Oakland),