designed operational chemical treatments for vegetation invading pavements and seeding practices for erosion control. In recent years, efforts have been directed toward a better understanding of native herbaceous and woody plants for roadside use.

The philosophy of the program in Texas at the present time is one whereby the Department not only plants and increases wildflower areas, but protects and maintains the existing investment of the past years.

Ohio's Contract Maintenance Program for Rest Areas

By Robert E. Tatman

Ohio was a pioneer in the development of roadside rest areas during the 1930s. The interstate highway system was started in the late 1950s and Ohio was again a leader in rest area construction. At that time, Interstate rest areas on a nationwide basis were few and far between. One reason for this was that the Federal Highway Adminstration (FHWA) did not consider rest stops essential to the highway system.

Ohio decided to proceed with rest area construction on the interstates without federal participation even though it meant using 100 percent state funds. The traveling public soon began to recognize the importance of being able to stop and relax for a short time, eat a picnic lunch, and let the kids make that much-needed restroom break. Cards and letters began to pour in and the FHWA soon came to the conclusion that rest areas were needed from a safety viewpoint and authorized the inclusion of the cost of rest area construction in Interstate highway construction funds.

As is often the case, being a pioneer can prove costly at a later date. Ohio's early efforts at showing the way resulted in rest areas with primitive rest room facilities. Although they were initially well received because they were the only thing going, these comfort stations increasingly became a source of discomfort, inconvenience, embarrassment, and, of course, complaints.

As travel increased, the toilet buildings were soon over-used for their original intent. Other states were providing modern water-flush buildings (thanks to federal help,) and were promoting tourism in a positive manner at rest areas, while Ohio, in comparison, was often referred to in an uncomplimentary manner as "the outhouse state".

In July 1980, the Ohio Legislature mandated that the Ohio Department of Transportation (ODOT) would upgrade the roadside rest areas on the Interstate highway system, along with selected rest areas on the primary road system. The new facilities were to have water-flush buildings, a sewage treatment plant (where needed), and picnic areas, all of which require more care and maintenance than the rest areas being replaced. After several delays, which are not germane to this discussion, an accelerated rest area modernization program is now underway.

Forty-three locations along the Ohio Interstate highway system will be the first to be completed. In addition, some other rest areas that are heavily used but not on the Interstate highway system, are being upgraded along with the interstate projects. Thirty-one rest areas have been placed under contract with 28 now complete and open for use. It is hoped that the majority of the Interstate highway rest areas can be under construction by the end of 1987.

Ohio law provided funding for this construction program with proceeds from the sale of vanity automobile license plates and federal highway dollars. The ratio of funding is 90 percent federal and 10 percent state for each project. Maintenance, cleaning, and upkeep of modern rest room facilities require more effort than did the 'privy" facilities. It was soon found that the staff resources needed to provide acceptable levels of maintenance at the new facilities were The combination of modern inadequate. buildings, picnic grounds, and sewage treatment plants with increased use by motorists required department-wide raising of standards and increasing of hours of maintenance. Employment ceilings mandated by the Ohio Legislature, however, did not provide the flexibility to hire the new state employees needed for rest-area caretaking. The search was begun for alternate methods of providing rest area maintenance and the initial program of contract maintenance was

In August 1981, the ODOT contracted with an adult sheltered workshop for the mentally handicapped to supplement state forces in maintaining the new twin rest areas just south of Toledo on Interstate 75. The ODOT cooperated with Columbus-based Ohio Industries for the Handicapped, Inc. (OIH) in organizing and expanding the program on a statewide basis.

The OIH is the centrally located, equal-opportunity, not-for-profit, marketing organization for Ohio's more than 185 sheltered workshops; these workshops are located in all 88 counties. The organization was formed by legislation effective in August 1977 to market products and services to state agencies, political subdivisions, and other instrumentalities of the state. These products and services are manufactured and performed by over 22,000 handicapped citizens.

The legislation also created the State Use Committee, which would review and approve each of these products or service before the state makes a purchase. This committee gives approval once it is satisfied that the item in question is fairly priced while meeting or surpassing the state's quality requirements. Prices are set to recover the cost of raw materials, labor, capital, overhead, and delivery costs, but without profit.

Because the OIH has the responsibility of selecting a local workshop to fulfill each contract, they have developed a thorough training program. Those workshops that are awarded ODOT service contracts are guided through the mechanics of costing the contract, and assisted with start-up responsibilities.

The OIH also aids each workshop in setting up a quality assurance program, which monitors on-the-job performance.

Perhaps the term "sheltered workshop" should be defined. This unit is an agency formed to assist the handicapped by providing a training program and paying a wage to the person undergoing this training. The workshop is certified by the Department of Labor to pay wages based on the prevailing wage but also by the person's ability to produce. For instance, if the prevailing wage is \$3.50 per hour and the client is able to work at a rate of 50 percent of what is considered a normal production, then he is paid \$1.75 per hour.

Historically, work shops provide shel tered make-work type projects generally do not pay the client enough money to live on. Most clients are on welfare rolls and are highly dependent on state subsidy. The ODOT has found that many of the type of projects being provided by the workshops do not stimulate client to increase his productive capacities, whereas meaningful work, such as the janitorial-type rest area projects, gives the client a challenge. Once they begin work at one of the rest areas, their productivity rate increases, allowing them to be paid more money and, in many cases, they no longer must depend on welfare. In fact, several of the rest-area caretaker clients trained and employed through this program were offered jobs in the private sector and went on to productive and successful ventures in private industry.

Currently, the handicapped are maintaining roadside rest areas, ODOT district office buildings, and will soon be involved in the maintenance of ODOT garages and outposts. The rest area program involves the following two types of contracts:

- The first type does not involve any state caretakers and OIH contracts for the total maintenance of the rest area complex. This includes building and picnic facilities, lawn care, litter control, snow removal, and sewage treatment plant monitoring.
- The second type of contract is set up to augment existing state forces and provide a higher level of service by expanding coverage. This kind of contract is usually confined to building janitorial maintenance.

Regardless of the season or the type of contract, all of the new roadside rest areas will be maintained every day of the week, 52 weeks a year. Expanding from that original rest area, the ODOT now has a total of 81 rest areas under contract with the OIH at the annual cost of \$3.5 million. To date, the ODOT has been satisfied with the OIH maintenance contract. The handicapped clients are highly motivated and have expressed a real desire to prove their competence.

The ODOT feels another factor contributing to the success of the program is the high degree of professionalism shown by the OIH staff. The Wood County pilot project was similar to any new idea--initial problems were encountered however, the OIH met these problems head-on, without offering excuses. The OIH did not and still does not suggest that the ODOT should overlook any situation because of the client's handicap, and the motto, "Keep ODOT Happy" has been adopted and adhered to throughout the growing program.

Over 1,100 disabled citizens, including disabled veterans and the mentally retarded are now employed in ODOT programs. This number will increase as the ODOT nears completion of the Roadside Rest Modernization program. Both the ODOT and the OIH plan to continue working together in providing a much-needed service to Ohioans. The ODOT is proud to have contributed a part in employing Ohio's handicapped adults.

Plant Growth Regulator Application Timing Research

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It has been evident for some time to many professionals that the effectiveness of plant growth regulators is dependent on the date of Studies at North Carolina State application. University (NCSU) have documented these date of application effects for several regulators. Applications of growth regulators, which provide excellent (90% or more) suppression of tall fescue seedheads when applied in the spring, result in less than 60 percent suppression following fall treatment Plant growth regulator applications during the winter have resulted in less than 70 percent suppression of tall fescue seedhead. In the growth regulator timing of applications during the spring has been found to be critical if tall fescue seedhead suppression is to be maximized.

During 1984, Escort@ (metsulfuron methyl) applied on March 30 was nearly twice as effective in suppressing tall fescue seedheads as an April 12 application. Treatment with Shortstop@ (EPTC) gave good seedhead control of tall fescue when applied on April 12, 1985. However, the experimental regulator, ACP1900, was more effective when applied on March 27. 1985 than when treatments were applied on April 12.

The previous examples amply demonstrate that growth regulator activity varies with the time of year and, most likely, with the stage of development of that plant. Field-growth regulator application programs have been traditionally scheduled on a calendar date basis. It seems clear from the previous