doors. I can remember this in our industry just after the War; you couldn't go in there because such and such is going on and people were reticent to tell you anything about their trade secrets, but I think nobody in the world has done more to break that barrier down than our distinguished guest here today, and I am sure we are going to have a very enjoyable and informative seminar with Mr. Wells as our very distinguished guest.

It gives me a great deal of pleasure on behalf of the Federation of Australian Nurserymen to wish the seminar well. It is another step in the right direction and all those associated with the industry should be very proud . . . Thank you very much.

THE PLANT PROPAGATOR HOLDS THE FUTURE IN HIS HANDS

JAMES S. WELLS

James S. Wells Nursery, Inc. 474 Nut Swamp Road Red Bank, New Jersey 07701

It has been my good fortune to have been able to travel fairly extensively during the past few years and this travel has of course been associated with my interest in plant propagation and the nursery industry, wherever it may be. I have been able to meet and talk with nurserymen in America, England, Europe, last year in New Zealand and now in your country, discussing with them problems of plants, production, propagation, business, all the items that together make the nursery world tick. Now one thing stands right out from all this and that is that the speed of change — whether in our business or in the world around us is accelerating to such a degree that even if we are aware of what is taking place, we feel quite unable to cope. In fact a book has been written on the subject and in many of the highly industrialized areas of the world, the problem of "future shock" is a very real one, for the future is arriving so fast and in such solid doses that many of us feel we don't understand and moreover we really don't know what to do with it.

The shock waves of change are running through the nursery industry also, and the most serious one is undoubtedly economic. People, by and large, are refusing to accept as they have in the past the rather rough and ready working conditions usually associated with horticulture, and the modest financial returns which may come from work of this type. I don't know what the situation is in Australia, but certainly in America, a very large

part of the farming and nursery operations is dependent upon migrant labor and these people do not enjoy a very high standard of living, nor do they earn high wages.

But today these people, all people engaged in land activities are beginning to look at other industries and then to realize that although they may prefer working on the land, nevertheless if they take a job in a factory they immediately have much better working conditions, fringe benefits, higher rates of pay, pensions, and so on.

The horticultural industry the world over is now coming face to face with this hard fact, and if it is to survive then it has to realize that it must not only try to equal the level in industry, but will probably have to do a little better, so that people can be properly compensated for the inevitable drawbacks of working with the elements.

But there is another squeeze coming, an even more serious one, and that is the need for land, good productive land. It may seem strange to you here in this vast continent, but there are substantial areas of the world where land is already extremely precious, and is most jealously guarded by those who have it. Good land is beginning to run out in many areas, which means that what land there is must produce at maximum efficiency.

I heard two rather disturbing statistics the other day, first that it takes about 60 good-sized trees to provide sufficient oxygen for one person and second, that about one million acres of land are being denuded of vegetation each year in America, to provide new roads, car parks, and so on. The inference is obvious.

Some scientists say that these changes, taking place at an ever accelerating pace all over the world, are already having a measurable effect upon the amount of carbon dioxide in the air, and this can, if it is allowed to continue, drastically change our whole environment.

So what has all this to do with plant propagators? Twenty-three years ago when our Society began it was my good fortune to give an address to the first meeting entitled, "The Plant Propagator — the Basis of Our Industry." This is really the fifth time that I have been in the happy position of essentially repeating this message, which I am most glad to do here in Australia.

In my original thinking it seemed to me that the plant propagator was one of the last strongholds of the real craftsman. Here may I quote directly from the first Proceedings:

"It is well for us to consider that the craftsmanship and skill of the plant propagator is the beginning of a long chain of events running through every phase of our industry. It is upon this skill, and upon nothing else quite so much, that all other parts of our great industry ultimately depend. Of what use would the land-scape architect or the garden contractor be to the homeowner if no plants of any kind were available? Where would the florist obtain his flowers, his bulbs and seeds, and what would be the value of fertilizers, barrows, garden centers and garden magazines without plants. Everything growing which is covered by the term horticulture has to originate with the plant propagator. He is, in very fact, the basis of our industry."

This was the way I put it 22 years ago. It has been repeated through the years, yet it bears repeating once again because it is so absolutely true.

THE PLANT PROPAGATOR, THE MAN WHO ORIGINATES PLANTS OF ALL KINDS, IS THE CORNERSTONE UPON WHICH ALL OTHER PARTS OF THIS VAST INDUSTRY DEPEND. WITHOUT HIM, WITHOUT HIS WORK AND HIS PRODUCTS THERE WOULD BE NO HORTICULTURAL INDUSTRY.

A further point which has become abundantly clear as I have traveled is that there is now a world-wide shortage of plants. I don't know what the situation is here, but in America anything of reasonable size is almost unobtainable. The same is true in England and on the European continent. Last year I was in New Zealand where I visited many nurseries and the situation seemed to be similar.

As one American grower put it to me recently, "We are in a seller's market and will be for at least the next ten years. People will be glad for anything they can get and we should take advantage of this situation to put our house in order and come right into the twentieth century as equal partners with other industries."

Throughout the world the demand for plants far exceeds the supply, and harking back to what I said earlier, with the vast urbanization of many areas, the need for and demand for plants is going to increase and will continue to exceed the supply for the forseeable future. This means, therefore, that the future does quite literally rest in the hands of plant propagators everywhere because the ravages which are being perpetrated on the natural vegetation of the world have to be replaced and replenished somehow. If the plant propagator does not do it, then who will?

Now, generally speaking, I do not think that the average propagator is actively conscious of this exceptional position which I believe he holds in the world of tomorrow — and perhaps that's a good thing, yet there is taking place a drastic change — note that word change again —in the attitude of the propagator towards both his work, and his fellow workers.

There was a time when the stringencies of economic competition made it necessary for the skilled grower to hold onto the small piece of individual knowledge which he had acquired, and to exploit it as much as he was able, to his own benefit. This philosophy produced the "locked greenhouse door," and similar restrictive measures which could perhaps have been justified under the conditions then prevailing. This did not matter too much, for the speed of change was extremely slow, the demands for stock were easily met with cheap and plentiful labor and profits might depend upon jealously guarding some small piece of information. However, the whole procedure could hardly be termed dynamic.

Today, of course, none of these conditions apply. We don't have the people and the demand exceeds the supply. The bottleneck is in production and in the rapid application of new knowledge, new ideas and techniques, so that we can all begin to meet the demand.

Now if all this is to take place, it needs the right climate of mental stimulation to succeed. The individual grower, working in his own little patch, usually just cannot generate enough ideas on his own, think up new methods, test and inovate, while still carrying on the everyday tasks which are inevitable in any land operation. He — or she — needs the stimulus of other minds, an opportunity to pause, and with kindred people to sit back and look at a problem together, argue, discuss and eventually arrive at an answer. This "meeting of the minds," this collection and re-distribution of ideas from one to another, is what the IPPS is all about.

I come now to the beginning of the Society. It commenced in 1951 and the first meeting was convened in Cleveland by Ed Scanlon. The Society had existed in the early twenties but had died a natural death as the depression developed, mainly because with the economic restrictions of the time, people with a little knowledge felt unwilling to share. When the meeting was called in 1951 it fell quite by chance to me to suggest the way in which we should organize. I thought a great deal about it and made suggestions which, at the time, received a "mixed" reception.

It was proposed that the Society should be organized on the basis of craftsmanship and that its purpose should be to bring together people with a knowledge of the craft of plant propagating and thus establish a reservoir of skilled knowledge and experience which should be recorded and disseminated so that people everywhere could benefit and growers of the future would have a record from which they could learn. Obviously for this to succeed there had to be a free exchange of ideas and information among members. I, therefore, proposed at the first meeting that the

three essentials for a person to become a member in good standing should be:

- 1) Knowledge and experience in some aspect of plant propagation
- 2) A high standard of integrity
- 3) A ready willingness, even a compelling desire, to share knowledge and skills with people of similar character.

These three criteria have been accepted as the cornerstone of our Society and as it has widened and extended its influence each new group has accepted the pattern with alacrity, and in most instances have been prepared to apply even more stringent demands so that the central governing body had to temper their enthusiasm to insure uniformity.

Three years ago at our twentieth meeting held in St. Paul, Minnesota, we had the pleasure of welcoming for the first time members from Great Britain and I presented a short paper on the "Philosophy of the Society," and I would like to quote briefly from what I said at that time.

"I am sure that very few of us really bother to read the By-laws, but they are important, and especially is this true of Article 2, which is deceptively short and simple. It reads:

The purpose of this organization is to secure recognition of the plant propagator as a craftsman, to provide for the dissemination of knowledge through proper channels, and to provide helpful guidance and assistance to plant propagators.

It is impossible to say how many hours of thoughtful consideration and study went into the phrasing of this simple sentence, but if you read it carefully and think about it, surely here is the simple essence of our philosophy.

First — recognition of the plant propagator as a craftsman. To achieve such recognition it is obvious that the person must indeed be a craftsman — a person of experience, knowledge and skill. We wished to seek out such people, recognize them, help them where possible but especially ask them to make available to similar people their wisdom in dealing with plants.

Second — In order to gather this knowledge, we needed to provide a method of collection and dissemination — our meetings and publications — and thus ensure that this knowledge would be recorded; and finally, we realized that we have a prime responsibility to help the young student, to encourage the new generation to learn what we know and to carry on the good work, extending the frontiers of knowledge, refining and, more especially, adapting our work to the rapidly changing techniques and vastly increased knowledge of this modern age."

These, then, were our objectives, and I think I can state without fear of contradiction that they have been amply fulfilled.

Which brings me to the present to you good people in Australia. I hope you can see from what I've said that the principles on which our Society was founded were thought through with great care and have been applied and developed through the years with similar care and adjusted as seemed necessary until we now come to the time when the Society is about to achieve a unique position in the horticultural world.

In the 23 years it has been in existence, it has exercised a profound effect upon the development of the horticultural industry, first in North America, then Canada, and more recently in Great Britain and Europe. With the current development of the Society in New Zealand and now Australia, we shall indeed be a truly international body dedicated to our craft and, most important of all, to helping one another. I am sure you can see that the potential is enormous.

May I try a simple illustration. We assume that 100 people come to a meeting, each bringing with him 10c worth of knowledge. Throughout the meeting each person shares freely with all the others from the communal "pot" of knowledge into which each has deposited his small share. Each person can thus withdraw from the pot, knowledge to a total value of \$10, thus everyone returns home richer for having come to the meeting. No one has lost, everyone has gained.

This simple illustration shows what has been happening in America and more recently in Great Britain. Its effect upon the whole horticultural industry has been stimulating and most valuable, for people now are really beginning to want to help each other. There is no feeling of holding back and anyone with a problem, feels — perhaps for the first time — that he can call a fellow member on the telephone and receive helpful encouragement and advice. For this climate to come about everyone has to understand and accept the principles upon which our Society works. Members freely and generously help each other and if we achieve this then the whole thing just has to succeed.

There is no question whatsoever that you, and your fellow growers in New Zealand, have a great deal to offer the growers in other parts of the world. You should not feel that because you are down here in the South Pacific you are out of things for I can see on every hand good people with good ideas which should be recorded. There was a time when distance counted and 10,000 miles was a long way. That just is not true anymore.

What is true is that keen minds from all parts of the world are facing exactly the same problems that you are. They can't get good labor. Costs are rising every day. Everybody wants 3, 4, and

5 foot plants when the biggest plant you have is 15". The government is becoming more involved in all that you are doing. The need for mechanization is universal. You name your problems and with absolute certainty there are 1000 people somewhere in New Zealand, England, and America who face precisely the same problems.

Some of these people have come up with the answers — not necessarily the best answers and not necessarily the final answers, but answers of some sort. It is heartening, encouraging, and helpful to learn what they are doing.

This, then, is the purpose of the International Plant Propagators' Society. It wants to put you in touch with people everywhere and it wants to bring people everywhere to you.

The most valuable thing of all is to bring people together as we have in this meeting for then there is immediately an animated, brisk, vigorous discussion, and whether you actually leave such a meeting as this with a gem of information which you can use really doesn't matter because you most certainly will leave feeling stimulated, encouraged, and recharged to meet your tasks with better heart.

So I have great hopes that you in Australia will help your-selves. Perhaps you can combine with your fellow growers in New Zealand to form a South Pacific Region. In any event you will run your own affairs and meetings, all of which will be of great value but add to this the stimulus of new ideas from all over the world from people of like mind and we have a formula for success which is unbeatable. A simple formula, yes, but it can enable us to meet the challenge of change which is going to be the hallmark of the next 50 years and, with this formula, I believe that the plant propagator will indeed hold the future in his hands.