

# Add freshness to urban gardens with native plants

Most of the ornamental exotic plants used in gardens require utmost care for their sustained survival, whereas maintaining the native plants is easier. Besides, the landscape would become stale with the use of the same old exotics in every garden, says **N. CHANDRAMOHAN REDDY**

All civilizations of the world began on the banks of rivers and lakes. Hence most of the present urban settings once were the centres of rich natural habitats with abundant resources of water and soil nutrients. Due to continuous destruction and fragmentation of habitats, these areas have become barren and impoverished. When it comes to the greening of these urban deserts, very limited variety of plant species are picked usually for the purpose of aesthetic appeal. These landscaped areas are poor quality habitats because they contain low plant diversity lacking complex vegetation structure. Bird and butterfly species that require healthy habitats containing a diversity of plants cannot sustain their populations in these sterile landscapes.

## Native vs. exotic

Generally we do not care much about the origin of the plants used in gardens, as their aesthetic value as expressed in showy foliage and spectacular blooms is given more preference while choosing. If the nativity of the plants is counted, we will be left wondering that more than 95% of the plants are exotics (plants which are not native to our region). Though the issue of 'native plants vs. exotic plants' is highly debatable, it is a fact that there are many advantages with native plants over the exotic ones. India has great diversity of plant species with many types of forest habitats in various agro-climatic regions, and there is no dearth of native plants which can match the exotic ornamental plants in aesthetic appeal.

## GREEN MATTERS

### Garden plant characters

While selecting any plant for the garden, we generally expect certain desirable characters such as evergreen nature, compact crown, attractive foliage, colourful flowers, coppice vigour (ability to throw new shoots), and appealing branching pattern. Since there are popular exotic plants with most of these characters, available easily with the local nurserymen, we use only those plants repeatedly.

Though there is nothing wrong in using the exotic plants, there are certain problems with some of them. Sometimes the exotics may pose danger to the native habitats by becoming invasive (Lantana is one such plant) or they may not support native birds, butterflies and other wildlife. Most of the ornamental exotic plants used in gardens require utmost care for the sustained survival, whereas maintaining the native plants is easier. Besides, the landscape would become stale with the use of the same old exotics in every garden. Most of the native plants are less exacting in terms of water requirement and care, as they are adapted to local pests, climate and soil conditions. Diversity of plant species is always preferable with native plants to add freshness and variety to the garden.

### Native plants are water wise

Water has become scarce and bought at high cost in urban areas and developing low-water-use garden utilising aesthetically appealing,



**VERSATILE:** Most of the native plants are less exacting in terms of water requirement and care. -PHOTOS: N. CHANDRAMOHAN REDDY

and drought-tolerant native plants is the best measure to conserve water. Xeriscape, a water-efficient landscape concept (published earlier in this column) with potential to replace traditional landscape practices mainly focuses on the usage of aesthetically appealing native plants in place of exotic species, as most of the exotics are generally water-thirsty and more demanding in terms of moisture and nutrients.

There is good choice of native plants for landscaping urban areas. Many native shrubs and trees produce

showy flowers and brilliant foliage and some of the deciduous species if planted in gardens may turn evergreen due to lesser competition and more care when compared to their natural dry habitat. Native plants can be easily propagated through seeds, where as many exotic plants and their cultivars do not produce fruits and seeds and they have to be propagated only by vegetative means. One must remember the fact that plants from seed are hardier and live longer.

On the other hand, some native plants may face ad-

verse growing conditions if they are planted in cities. A plant that thrives well in the natural habitat or countryside may not be able to survive the heat and automobile exhaust if it is planted along a city road. Hence careful selection of hardy native plants which can withstand the vagaries of urban environment is needed for various situations and locations like polluted areas, rocky and shallow soil conditions, and shaded places.

### Conserving gene pool

Ecologists say that the spe-

cies extinction, which has become rampant due to the urbanisation and degradation of forest habitats, can be prevented by introducing them into the horticulture trade. This is evident by the fact that many plants which are extinct in their native habitat are surviving in gardens. Thus the native plants nurtured in gardens can potentially aid conservation by contributing to genetic diversity and buffering the species from extinction.

### Improving urban habitats

Besides the advantage of



requiring less care, the addition of many native plants in the landscape can improve the urban environment by having more number of native wildlife which helps in balancing the population of urban pests like mosquitoes, cockroaches, flies, and rats.

The habitats with native plants can also check the invasion of exotic weeds such as Parthenium, Lantana, Hyptis, and Water Hyacinth. One more positive factor about the native plants is that they are never invasive and their populations will always be under control due to the pres-

ence of natural predators.

With the current population explosion, we are losing natural forest areas at an alarming rate and creating new urban habitat with native plants will not only help in balancing this loss, but also in enhancing the quality of urban living.

### (To be continued)

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## House-lifting technique gaining popularity

After successfully raising a building and bringing it on par with road level at Venkataramana Colony, Mamchand and Sons Company is now executing works at four temples at Kadapa, Yanam near Kakinada and Srisailam apart from two houses in the city, writes **M. SRINIVAS**

The technique developed to lift and shift a house seems to be gradually gaining popularity in the city and other parts of the State. The company which has perfected the technology these days is besieged with requests from those either seeking to lift a home or relocate a structure.

Weeks after successfully raising a building by nearly three feet and bringing it on par with the road level at Venkataramana Colony in Nagole here, Mamchand and Sons Company has been receiving orders from different places. The company is now executing works at four temples at Kadapa, Yanam near Kakinada and Srisailam apart from two houses in the Capital.

On Thursday, the company technicians shifted Sri Anjaneya Swamy temple to some 200 yards back and placed it in a farmland at Chennur village in Kadapa district. After the pillars are strengthened, devotees will be allowed to perform pujas.

The relocation work was taken up after the villagers dismayed at the district administration's decision to demolish it for a highway, approached Mamchand and Sons. The company technicians inspected the area and assured that the decades-old religious structure could be relocated without cracks, says Harkesh Kumar Chou-



**NEW TECHNIQUE:** Workers lifting an independent house at Malakpet using building-lifting technique on Thursday. -PHOTO: G. RAMAKRISHNA

han of Mamchand and Sons. In Hyderabad, a two-storeyed building owned by a political leader Amarendra Goud was raised by six feet a few days ago and cellar for parking vehicles was created. "Mr. Goud approached us complaining about parking problem. The family was also facing problem during the rainy season as rain water

gushes into their house," Mr. Chouhan says.

The technicians raised the house using building-lifting technique and solved problems faced by Mr. Goud's family. Instead of parking their vehicles on the road, the family can now park vehicles in the newly created cellar.

According to Mr. Chou-

han, property owners were approaching the company after it successfully executed the work in Nagole where they lifted the structure without it developing a single crack and the wall tiles, window grills and doors remaining unaffected.

With the help of 15 persons, the company brought jacks used in heavy vehicles

to lift the house. Initially, they dug up the basement, cut the pillars with gas cutters while using 200 cone shaped jacks and wooden pieces to take the load of the building. "Using these jacks, we lifted the building by three feet and used the same technique to lift houses in other areas," Mr. Chouhan explains.

## A home away from home

Tourists, the employed or even students can opt for service apartments as they are less expensive than hotel, writes **RASHI TIWARY**

The culture of travel, migrating to Tier-I and Tier-II cities for jobs and the boom in the tourism industry as a whole has led to the proliferation of a large number of service apartments in the city.

These service apartments are more predominant in pockets of the city such as Hi-tech City, Kondapur and Chandanagar which are in the close vicinities of IT companies. Apart from the considerable chunk of IT force working in Madhapur, Kondapur and Gachibowli, even those pursue higher education at University of Hyderabad, choose to stay here.

Most of them opt for service apartments as they work out less expensive than hotels. Moreover, almost all service apartments nowadays allow the option of staying with families for those intending to stay for a long period of time. Real estate agents believe that such service apartments help to create a home-like environment and that is another reason why they are preferred to hotels. They are also competitively priced owing to the cut-throat competition from their rivals.

Mr. Suresh, the marketing manager at Nirvana Service Apartments in Banjara Hills, says that for a standard room, the rent is Rs.2,400 per day and that includes more than just the basic amenities like wife, a Tata Sky connection



**AFFORDABLE:** Service apartments are also competitively priced. - PHOTO : SATISH H.

and a private kitchen. They lease out rooms to Corporates as well as families. "However, demand particularly shoots up during the marriage season," he adds.

Livewell Service Apartments situated in Hi-tech city caters mostly to outsiders and remains busy.

They offer added services like a complimentary breakfast, swimming pool and gym though at slightly higher prices. A single room is available for approximately Rs.2,250 per day and a double room for

approximately Rs.2,800 per day.

Some agencies offer several service apartments in other parts of the city too. For instance, Falcons Nest Service Apartments offers its services in Banjara Hills, Jubilee Hills, Madhapur and Gachibowli and rates differ according to the locality. Important amenities like round the clock security and water supply are provided by them. For immediate occupancy and comfort, service apartments are seen as a viable option.

## An essential handbook on safety aspects of construction practices

### Continued from last week Acoustics

This section covers planning against noise, outside noise levels, acceptable noise levels and the required sound insulation systems for buildings of varying occupancies.

Noise levels from different sources are as below :

Aircraft—around 110 EPN dB, b) Rail around 80 dB (A), c) Road traffic—around 75 dB (A)

Acceptable indoor noise levels are as below :

Apartments—25 to 40 dB (A), b) Auditoria —20 to 25 dB(A), c) Public offices 45 to 50 dB(A) and so on.

Therefore sound insulation

systems are to be designed to achieve the acceptable inside noise levels from outside noise due to road traffic, etc.

Recommendations have been given to identify sources of noise both from outside and inside a building and the methods of reducing this to acceptable indoor noise levels through site planning and constructional means for several occupancies. These include residential, educational, hospital, office, hotels and hostels, industrial, laboratories and test houses and other miscellaneous buildings.

For constructional means of securing acceptable indoor noise levels, sound insulation

values for various types of materials and construction are given and also construction procedures for sound insulation of buildings are included.

### Installation of lifts

This section covers the essential requirements for the safe installation of lifts (passenger, goods, hospital and service lifts) and escalators to ensure satisfactory performance.

The essential requirements for lifts, among others, are the following :

a) Conformity to the Lifts Acts and Rules and also to Indian Electricity Rules, b) Factor of safety shall not be less

than five, c) Guide Rails and Buffers, d) Lift Wells e) Lift Pits and Lift Cars f) Machine room etc.

The most important essential requirement for escalators is that the angle of inclination to the horizontal shall not exceed 30 degrees.

Both lifts and escalators shall be tested at site.

### Plumbing services

Plumbing services shall consist of three sections, namely, Water Supply, Drainage and Sanitation and Gas Supply.

Water Supply—This section covers the following; a) Water supply requirements of buildings, such as,

residences, hospitals, offices, hostels, hotels, cinemas, factories and so on. For residential purposes the recommended water supply is 200 litres per head per day. This supply will cater to drinking, cooking, drainage and sanitation purposes.

Additional water shall be available for fire fighting purposes.

Design of Distribution Systems with specified materials, fittings and appliances.

Conveyance and distribution of water within the premises and general requirements of pipe work.

Laying of mains and pipes on site and jointing of pipes. Information on hot water

supply Water supply systems in High Altitude or Subzero temperatures.

Illustrations are given regarding the installation of water supply in high rises such as, 8 storey and 20 storey buildings. Also information on testing inspection and maintenance is given.

### Drainage and Sanitation

This section covers the drainage and sanitation requirements of buildings, design, construction and maintenance of drains inside buildings and from buildings up to the connection to the public sewer. It also covers drainage systems for High Altitudes and Sub zero locations.

Guidance regarding selec-

tion of plumbing systems depending on the nature of drainage load as well as the height of the building has been given. Amplified Single Stack System details has been included.

Requirements of refuse chute system for transporting and collecting in a sanitary way the refuse from floors at different levels in high rises is also covered.

Gas Supply—A minimum set of safety regulations are laid down for domestic piped gas supply. These include a) Pressure regulation, b) Service shut-off valves, c) Rules for turning the gas on and off, d) Installation of gas pipes and so on.

Testing of o leakage in pipes carrying gas shall be with a soap solution and NEVER with a lighted matchstick.

This part covers the requirements with regard to public safety, structural safety and fire safety of all signs and display structures. These structures by definition are treated as buildings.

The types of signs covered are a) Electric and Illuminated signs, b) Ground signs, c) Roof signs, d) Verandah signs, e) Wall signs, f) Projecting signs, g) Marquee signs, h) Sky signs and i) Other Miscellaneous signs

AJITHA SIMHA