OUR ABILITIES, AND THE BENEFITS WE CAN PROVIDE TO ADD INNOVATIVE ATTRACTIONS TO **DUBAI GARDEN GLOW** 3RD YEAR (AND BEYOND)



We are inspired; we have initiative to do innovative design concepts for Dubai Garden Glow related to flowers, birds, etc.

We know the birds, animals, ants, bees, butterflies, in-person for years, which enables the graphic designers at FLAAR to create memorable experiences for visitors to Dubai Garden Glow (and thus to attract even more visitors).





FLAAR has one of the largest archives in the world of high resolution images of tropical flowers, trees, and landscapes. We already have closeup macro photographs of ants, bees, butterflies, bats, and insects.



We already have a team of industrial designers and graphic designers who have been working specifically on doing renderings of flowers, trees, fruits, macaws, and monkeys.

And also, because Dr Nicholas has been a professor for several years, he enjoys sharing his knowledge with the world.



I spent time on the Internet to look at eight Lantern Fest exhibits: six in USA, one in Austria, one in the UK. Although some of their temples differed from each other, their tulips in every show were very similar. And several other aspects were copied from one show to another. Of course this makes it cheaper, since then the set-up company is doing tulips and reef fish and nice fat seated birds that they have already done a dozen times before. So I can understand that using standardized scenes is normal.

But, at least some of the attraction area should be unique. This is where FLAAR experience in plants and animals of the New World tropics can help. First I review what I liked about this current 2nd Year display. Then I will list my suggestions for noticeable improvement by using innovative concepts which FLAAR can provide.





The trees with changing lights are great. I like them every year. Because they are so nice, I will not suggest changes for these trees.



However, if in further future years, you wish even more awesome trees, I have been studying tropical trees for years: fruit trees, flower trees: all sizes and shapes. We can show you photographs and designs which will cause your audience to literally stop in their tracks in awe. And photos (selfies) and other photos of our tree concepts will be posted around the world (and bring even more people to each subsequent year). But our FLAAR tree concepts I prefer to hold off until Year Four. For now (for Year Three) I prefer to work with flowers, pollinators (more than bees and butterflies), and other ideas. But let me continue with praise for the current 2nd Year displays: especially the ocean reef with jellyfish.





The jellyfish and coral reef scene is awesome. Of course there are coral reefs on the Caribbean coast of Guatemala, Belize, and Mexico, but what you had this year was remarkably beautiful and very well done.

- In past years I had a SCUBA license, so I know reef creatures from first-hand experience.
- I have a substantial library of reefs of the world at the FLAAR office.
- Portions of my PhD dissertation were on creatures of the Caribbean reefs.

I am going to propose that the FLAAR team (web master, web designer, industrial designers, graphic designers, botany research, zoology researcher, and managers) do two theme concepts:

- 1. Flowers, bushes, pollinators, two tunnels, four walls.
- 2. Animals (and birds) in trees; animals (and reptiles) in rivers; animals on the ground.

Each of these themes would have six to eight "locations" or stations (areas of intense interaction with the audience). For example, the nice leaf-carrying ants is one location or one station (whichever word you prefer).

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Let's start with FLOWERS and everything related to flowers





Butterflies, from eggs through larvae to butterflies

We raise butterflies in the botanical research garden surrounding the FLAAR offices. So we have experience in all stages of eggs, larvae, to butterflies.

Butterflies: showing all sizes, all colors and all camouflage shapes (mimicking leaves, for example).

Not only do we study butterflies in the mountains, deserts, and jungles, we have an impressive library, in-house, of books on all pertinent insects, especially butterflies.

So, presently the Garden Glow shows pretty butterflies: we will impress the viewers with knowledge, information, and diversity: Our goal will be to literally awe the audiences with our designs (which will be glowing from inside, but the layout and concept will be much more than just decoration).

In other words, it's nice to have low-cost mass-produced butterflies. But we can provide renderings of butterflies where parents, grandparents, and kids will say, "wow, I learned so much" (in addition to doing a dozen selfies in front of these butterflies).





Pollinators





It is understandable that so far the garden shows primarily butterflies and bees doing flower pollination. But actually there are

- Moths
- Pollen wasps (even a wasp that makes honey)
- Ants
- Bee flies (Diptera family)
- Hoverflies
- Flower beetles
- Hummingbirds
- Bats
- Mammals (yes, 4-legged animals pollinate some flowers)

We know these creatures; often we are photographing the flowers at night when the bats come. Yes, many flowers do not open until nightfall. We even do stop-motion sequence of photographs.

7



Honey Bees without Stingers

Wasps that make honey; yes, a species of Wasp that makes honey.

Bees without stingers; yes: 60% of the bees in Latin America have no stingers. And, their nests are different size and shape.



Flowers, Fruits

Since I like both plants and animals, and because both flora and fauna have looked great in Year One and Year Two, I would enjoy continuing with both vegetation and wildlife in our colorful concepts for Year Three.



Maize Walkway: corn is eaten around the world, but its yellow or white. We will showcase red, orange, black and speckled maize cobs (the original colors) as a walkway wall (on each side of the path).



The two or three Chili peppers look cute at the Glow Garden. But the chile peppers that we already raise around the office in Guatemala will make a new "chile section" a fav favorite. Our improved exhibit will show a dozen different chile sizes, shapes, and tastes.

10



Squash, gourds & pumpkins: a bit are bright and colorful already, but the range of size, shape, and colors that we at FLAAR are familiar with can enhance the visual enjoyment aspect of Year Three.



Tomatoes are known and popular world wide: they originally come from Peru, Guatemala, and Mexico. Tomatoes actually exist in many colors, sizes, and shapes, so will make a good exhibit (especially for nighttime illumination). Your food stores can of course sell more tomato-flavored foods as a result of this segment of the Garden Glow.







Cashew nuts are popular worldwide. and are considered a prestige nut (more expensive than the common peanut). But cashews are actually not a nut... they are a gall-like structure hanging OUTSIDE a fruit. The fruit is soft and squishy. So we can show the actual fruits, and the flowers. Visitors will definitely remember this. Your food vendors can then sell cashew nuts to attendees and make more profit for the vendors and for the overall



Avocados are not from California; they came to California from Guatemala and some varieties from Mexico. Wild avocados still grow in many places in Guatemala. We study all these species. Guacamole and other avocado products can be sold to visitors. Your food vendors can then make more money selling guacamole to visitors.





Anonas and Zapotes come in many sizes and shapes. There are small round zapotes and giant zapotes the size of a watermelon. There are anonas of remarkable exterior shape. Visitors will never forget what they see in this segment of the FLAAR contribution for your garden.



Pitaya, *Hylocereus undatus* is an exotic fruit. The flower "explodes" open at night, and is called Queen of the Night. Since your flower engineers know how to make flowers "move" we can select flowers whose movements are explosions of color.



Flowers

Because we have been studying tropical flowers for many years (I first lived in the jungles at age 19 already in 1965, for twelve months; then 5 years in the 1970's), we can produce new segments of Dubai Garden Glow which will be popular with visitors. And, once our flower designs are present, we can promote them on our web site.

Flowers of Bombacaceae (now subfamily Bombacoideae)

This group of trees produce awesome flowers:

- Ceiba aesculifolia
- Pachira aquatica
- Pseudobombax ellipticum (some pure white; others awesome pink).
- Ceiba pentandra (flowers are small, but are in a group; tree itself is taller than an 8 story building) but of course can be shorter, and can have low branches, even under 2 meters off the ground, so at eye-level).





Lei (necklaces for visitors to Hawaii) are actually from Mexico, Guatemala, Belize, El Salvador, Nicaragua's national flower, and grow also in Costa Rica.

We raise this tree and flower in our garden.

There are many of these "frangipani" trees already alive in the Zabeel Park. But ours would be the size and illuminated style of the flowers of Garden Glow. We would show all the different swirl-angles of the petals and all the different colors (the ones in Zabeel Park are mostly white; but these flowers come in many other attractive colors).





Red Hand Flower, will be great for backdrop for selfie photos



Cassia trees have awesome pink flowers. I like these better than the yellow-flowered Cassia trees.

Annatto flowers and open seed pods: this is more a colorant than a spice, but the flowers and seed pods are photogenic.

Heliconia flowers can actually be used as a "wall" on both sides of the walkway for an appropriate length. These flowers are awesome, come in downward hanging and other species in upward sprouting angles. We raise four species around the FLAAR office and know many more species.

Dahlia is a popular flower in gardens around the world: parts of the plant are edible. This plant is native to Guatemala and we have it in our own FLAAR ethnobotanical garden.

Cotton is a major product of Egypt. Different species of cotton comes from different parts of the world. Cotton of Peru (of the Inca civilization) colors in natural colors (yes, no dye; the cotton itself is already a color). We have just learned that such varied colors of natural ancient cotton also came in different colors in Guatemala. We have been growing brown cotton in our FLAAR garden for many years.



Each year we would like to introduce new flowers, so for the coming 3rd Year of Dubai Garden Glow we would like to limit our portion of the park to the flowers listed above and below.



Unto



Walls & Tunnels

The walls and tunnels are another area where our 50+ years of experience working in the jungles (and deserts) of Latin America will allow us to create photogenic and awesome exhibits that parents, grandparents, and kids will be so happy with.

We can suggest (for the coming year) as many wall areas as you wish (up to four for the budget; of course we can do even more if the budget is increased).

We propose two tunnel design concepts (we can do even more tunnels if you wish to increase our participation). But two tunnels for Year 3 are a good way to start.



Flower Wall:

The flower wall(s) that you already had were great, But our idea is to create a wall of flowers starting with single-petal and double-petal flowers at the left and moving towards 3-petal flowers, then four-petal flowers in the center; then 5, 6, 7, petal flowers towards the right.



Wall of Leaf Shapes

Philodendron leaves impress people in every botanical garden in the world.

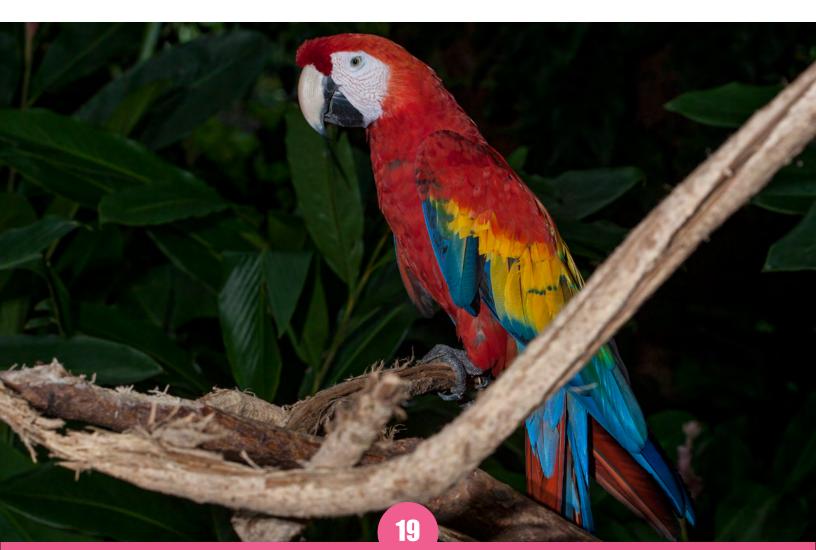
Brightly colored leaves of maple trees are respected as art produced by nature.

We would like to introduce one area of leaf sizes and shapes for 3rd Year, and go even further in 4th Year (there are "sensitive plants" whose leaves fold up when you touch them. These are native to Guatemala). But we want to start with a walkway with a "wall" of illuminated leaves of diverse sizes, shapes, and colors for 3rd Year.

This wall of leaves can either be an open tunnel walkway, or an illuminated wall along both sides of the trail for 20 meters or more (can be the same length as the present-year semi-circular wall)

Wall or other display of colored bird feathers:

- Macaw feathers
- Quetzal feathers
- Iridescent feathers of the neck of a remarkable species of hummingbird





Selfie areas

The "magic chariot" or wagon was used as a photo platform by families.

So I suggest designing a "selfie area" in several of the "theme areas." The purpose of these selfie areas are so at least several hundred thousand of the visitors will not just take selfies but each visitor will send these selfies to all their friends and relatives (who in turn will send to more friends and relatives).

So another MILLION people will not only learn about Dubai Garden Glow YEAR THREE, but they will see the logo, since each "selfie area" will have the logo intelligently visible.



Tunnels

There were at least two tunnels: the oval one and the heart-shaped one. We would propose significantly more innovative tunnel concepts.





When I show photos of these plants to people, if they have seen the tulips, the coral reef fish and turtles, etc; they prefer the "air puff" style.

We can do the "linear lighting" style shown here, but prefer the fully-covered hollow style.



We can also create for this style, but we prefer more eye-catching shapes and more natural colors. Perhaps these white forms turn into full-color at night; if so, we never noticed them because the other parts of Dubai Garden Glow were so eye-catching





Theme Areas where FLAAR team can design Attractions featuring ANIMALS (and reptiles, amphibians, etc) Jungle Life in the Treetops

ANIMAL KINGDOM theme for two years has been Africa. New World creatures are equally photogenic and would allow a "new" aspect, especially the flowers at both sides of the entrance.



The nicely illuminated left side of the trail we would also re-do (would be totally different inspirational "illuminated" segments).





I don't have any close-ups of this flamingo, monkey and crocodile section, but I really liked it. In Latin America we have three different species of crocodiles, two species of monkeys, and a dozen animals which live in trees, so I would like to expand this "treetops" concept (I like the river of LED lights flowing beneath it).

Jaguars climb trees, ocelots or margays climb trees. Puma cubs love to climb trees and play on the limbs.

The trees can also have a message of preserving the environment: if you bulldoze the forests there will be no more trees for the animals to hang out in.





Felines

- Jaguars (come in black, gray, white and traditional color)
- Mountain lions
- Jaguarundis (come in brown, gold, dark (blackish) colors)
- Margay
- Ocelot



Most people don't realize that two of these felines come in many different colors.

Monkeys come in two kinds: cute spider monkeys and the larger howler monkeys. A sound track would allow visitors to never forget this monkey. It sounds like a jaguar roaring. These monkeys are different than apes of Africa.

Tapirs are one of the largest animals of the jungles of Latin America. They live in water about half the day (like Hippos), so good to have for the rivers in the Zabeel Park.

Two species of **crocodile** and one species of **alligator** (caiman) could be added to the creeks and lake edge of Zabeel Park. I included these creatures in my PhD dissertation and have studied them for many years, both out in the jungles, and in zoos (the local zookeepers let us go into the cages so I can do photography of their teeth).

Tailess Whip Scorpions look deadly, but I have them wandering over my hand and arms and they never bite me. We have them INSIDE the FLAAR office in Guatemala. They would look great 2 meters long, and with their pinchers and whiskers with motors!

Centipedes and **Millipedes** would also be remarkable at 2-meter length, all curled around (and even more awesome if they could be "motorized").

Horned Beetles look ferocious but don't do much harm. But at 2-meters in size, and illuminated inside: great idea.







I have studied ants for decades. We raise ants in our office (probably several thousand). The ants the last two years are really colorful, family-friendly, and well done. Even though already present for two years, their positions relative to each other have been different.

If desired, we can render brand new concepts, both as groups (ants interacting) and as decorations along both sides of a segment of walkway about 2 meters (or whatever length is desired as an "illuminated area."

There are many diverse species of ants. I first began studying ants when I lived in the jungles of Peten area of Guatemala for five years in the 1970's. I made this entire area into a national Park (Lake Yaxha national park). Since then I have studied ants which carry flowers to their nests for five years (in Honduras and Guatemala). We have an immense reference archive of high-resolution photographs of these ants.

One aspect of ants we could introduce is ant symbiotic relationship with plants: the plants provide a hollow space for ants to live in; in appreciation the ants protect the plants. We have been studying and photographing this for many years: so can show interesting plants and the ants: all in an enjoyable, fun, colored way as is the style of Dubai Garden Glow.



Most of our focus for Year 3 will be flowers & animals (two theme projects). For Year 4, our focus will be Birds of every size, shape, and remarkable color.

So for Year 3 we would like to have three stations with birds to observe how the visitors really like these concepts.



Owls come in many sizes and shapes. There are so many different owls, I would suggest having them on both sides of the walkway (to make a passageway). Or, have all the owls on one side, and other raptors on the other side (eagles and hawks).

The **King Vulture** is one of the more photogenic birds; but if a buzzard is inappropriate, we can skip it. However there are four species of vultures in Latin America. They help clean up waste, so are very useful to people. And the King Vulture is beautiful. I would really enjoy showing him at a 2 meter length and 1 meter high, with his coloration brightly illuminated at night.

Water Birds of dozens of species and many sizes, shapes, and colors, are common from Florida (USA) down through Mexico, Guatemala to South America. I studied water birds for my PhD dissertation on Mayan art and iconography, and still study water birds today: of rivers, lakes, and oceans (since Guatemala has the Pacific Ocean on the west and Caribbean Sea (Atlantic Ocean) on the other side. Since there are several creeks and the big lake, water birds are good idea. Plus people seem to like bird-watching.



One area which definitely needs improvement

Miscellaneous Spheres: everyone who saw these politely suggests they should be replaced by something more innovative for the next year.



These geometric balls are okay as space fillers. But so much more fun to have other designs. I suggest that we put owls in this area; they do not all need to be high in the trees; owls capture most of their prey on the ground.

27



We have over 50 years experience in architecture, as would be expected from a heritage in architecture from our Hellmuth family (HOK Architects, etc), but for the coming year (Third Season), I prefer not to do any Maya, Aztec, Inca architectural renditions (I also worked in archaeology of Peru two summers, once for Harvard project; then for a Yale University project).

I prefer to save showcasing Mayan temples, pyramids, palaces, and ball court sports stadiums until the Dubai Garden Glow which will coincide with 2020 world's fair (since obviously you will get millions upon millions of visitors).

For the last six years we have been doing research on native palm thatched residential houses of remote jungle-covered mountain villages of the Mayan people, so for 2020 we can do an illuminated rendition of this frankly eco-friendly style which has been used for thousands of years.

The swamp trees are very well done. I also like the "talking tree" and the bamboo areas of pandas (mainly the first year). We at FLAAR also work with tree species: trees of different sizes, shapes, and different colors of bark. We would prefer to focus in the 3rd Year on flowers, felines, and treetop animals, and for 4th Year introduce the impressive trees.

Your experienced engineers can easily "engineer" the physical wire and cloth covering and the lighting inside. You do not need to pay us for this. However it would help if our industrial designers had sample 3D renderings of your "Mexican chile," pumpkin, bee and butterfly, and tree with monkey-and-squirrel so we can have our renderings closer to what the engineers will need.





Our characters are based on many years research, so they are copyright FLAAR. We are open to discussing licensing their use by your company also in future Garden Glow events in countries in the Middle East and Africa.

Some of our images and characters could be made into dolls or mascots to sell to families. If we are paid the full development fee up front, we would not ask for any sales commission whatsoever on the money you earn during any season or year when we are under contract and earning a basic fee for providing services to the garden. It would be understood that dolls or mascots would not continue to be sold of our images if FLAAR is no longer being funded for garden glow designs or services.

The cost for our illustrators, editors, managers, etc is \$51,000 for all tropical flower, gorgeous plant, cute bushes with any and all bees or other insects and any creatures which are physically associated with these plants, bushes, and/or flower concepts as pollinators.

This reasonable fee includes us doing TWO tunnel design concepts and as many WALL concept areas as you prefer (up to four) (walls along both sides of the walkway, or if on a fence, then usually one-side). Each "wall" concept for bordering a path is both sides of the path (usually bilaterally symmetrical).

This price is technically below our cost since in order to do the research, do the field trips to reach mountains, swamps, rivers, lakes, jungles and deserts (yes, there are two desert areas in Guatemala), it has cost us \$25,000 a month, every month, for several years (plus more than 40 years experience with archaeology, flowers, and animals in Mexico, Belize, Honduras, El Salvador, and Peru). Nonetheless, we are not charging per month for all the months we will prepare these scenes; the fee is a one-time fixed fee per theme: one fee for flowers etc; separate fee for birds, mammals, reptiles and trees.

\$42,000 for all awesome birds, mammals, reptiles, and trees which can enhance and largely replace the African animal groups. People will say WOW in their reviews if they are exposed to animals which they have not seen before. This modest fee also includes our team making other creatures which can be placed in the creeks (there are several real creeks plus additional creeks created by rippling effect of rows of LED lighting). This sum includes all "treetop" animals which are pictured in trees (monkeys, cute squirrels, etc).

The purpose of our work at FLAAR for Dubai Garden Glow is to increase favorable international publicity by visitors (so not more PR releases by the organizers, but more attendees themselves saying how much they enjoyed bringing their families here). If there are favorable reviews (by visitors), this will increase attendance which will increase profits. So merely 5,000 extra families will pay every penny of the FLAAR work (of course our goal is to attract multiple times more, but all that extra profit goes to Dubai Garden Glow organizers). Thus it is crucial to have both our two segments: FLOWERS and ANIMALS, both adequately funded.

All curious animals such as the impressive tapir (which lives in water somewhat like a hippopotamus), crocodiles (which of course live on land and also in the water). Ironically both the jaguar and jaguarondi like to swim (so not like house cats which dislike water). Plus jaguars love to jump into rivers and lakes to eat giant crocodiles.





We can also provide design concepts (with animals) for fence walls (border of the park) and for "exhibit walls" on both sides of the paths. Plus we can also provide open-sided tunnel entrances, open tunnel walls and and tunnel roofs. In other words, we can provide walls and tunnels of flower designs and animal design too (one area for flowers; another area for animals).

We have experience with marine turtles, stingrays, sharks. We can even show the giant Caribbean shark that also likes to go inland, into fresh water, so into rivers and lakes. Our goal is to WOW the visitors with awesome exhibits and to have the visitors so happy that they and their children have learned so much from their experience in the Garden Glow area.

Since Dubai Garden Glow already had a reef exhibit, we will not copy that concept. However we do have experience diving and snorkeling in Caribbean reefs plus we have an ample research library of books on every aspect of reef fish, animals, etc. This we can do for a future year if desired. But for Year Three we will focus on land animals, river animals, and treetop animals.

For Year Four we can do birds so awesome that your visitors will write great reviews, will tell all their friends, and not only will more people attend, but those who attend will be even more content. However for Year Three, we prefer to concentrate on two concepts: flowers, pollinators, tunnels & walls; and animals, reptiles, treetops, land, and river animals.

I spent over an hour reading the comments on www.tripadvisor.com about Dubai Garden Glow 1st Year and the few on the 2nd Year. The comments that I noticed allow me to understand how to make the experience even better.

We will not charge any fee for suggesting improvements to the Dinosaur area.

We will not design any dinosaur exhibits, but we definitely do have ideas on how to make the dinosaur area even more fabulous (and to make it better than any Dinosaur Park elsewhere in the world.

All drawings by FLAAR are electronic. All our drawings are done with a Wacom pen tablet or comparable pen tablet. Some of our illustrators use PC computers; others use Mac computers.

If there is a special format, or a special software that your engineers need us to use, please let us know in advance.



Since all our renderings will be electronic, they can be transferred by your engineers into the CAD plans or whatever other design format your engineers need.

If our team has to do any additional transferring or changing of software or buying new software after we send the original drawings to Dubai, we would only ask for the raw cost of our illustrators doing the required changes, plus the cost of any special software and computers that we would need.

If at the last minute additional space in the garden needs to be filled with our style of flowers or plants or animals, we will gladly assist your team at a reasonable basic cost.

For 2020 we can prepare more than just temples and pyramids of Latin America, we have another theme concept for a subject which will attract both children, parents, and grandparents.

But we prefer to start with your 3rd Year; then each year offer exciting new concepts, leading up to a blockbuster worldwide popular concept for 2020. And we would never ask to hog the entire park: we would only do pertinent segments (so you and your other partners can have your own themes).

Plus, our themes will always be decorated by your own team, so will fit in well, visually and as concepts, with the other aspects of Dubai Garden Glow.

For dinosaurs you already have consultants, etc; we prefer to focus on flowers, trees, and concepts of the Americas: North, Central, and South America. However, at no cost, we can definitely suggest new display ideas for dinosaurs (since if they are not a bit new each year, previous visitors will not return).

We will not sell our images or designs or concepts to competing Lantern Fests in UAE, Saudi Arabia, or any country in Africa where a license fee is paid to FLAAR for using our concepts in Middle East or Africa.

















These two illustrations are an example of the capability of the illustrators and graphic designers at FLAAR. This artist has been working with FLAAR over three years.

This single photograph (below) is an example which documents our experience working with lots of popular edible plants. We would enjoy illuminated these at meter-high size (vegetable by vegetable, fruit by fruit) and as a result make Dubai Garden Glow literally world famous as an innovative attraction.

We loved the Mexican chiles (and other veggies for this year). Our goal is to be even more innovative and thus attract significantly more people to your Dubai Garden Glow.

