BLUE HERON PARK – EAST BLUFF RESIDENTIAL COMMUNITY

<u>Planting Concept for Butterfly Gardens in the 'West Area' and 'Monument Area'</u> (with additional information for a possible future garden in the 'South-East Corner Area')

> Design and Implementation Plans Prepared by Pollinator Protection Fund – Laura Ford



November 18, 2022



Blue Heron Park – Previews – Previous Example in Laguna Beach (Heisler Park)

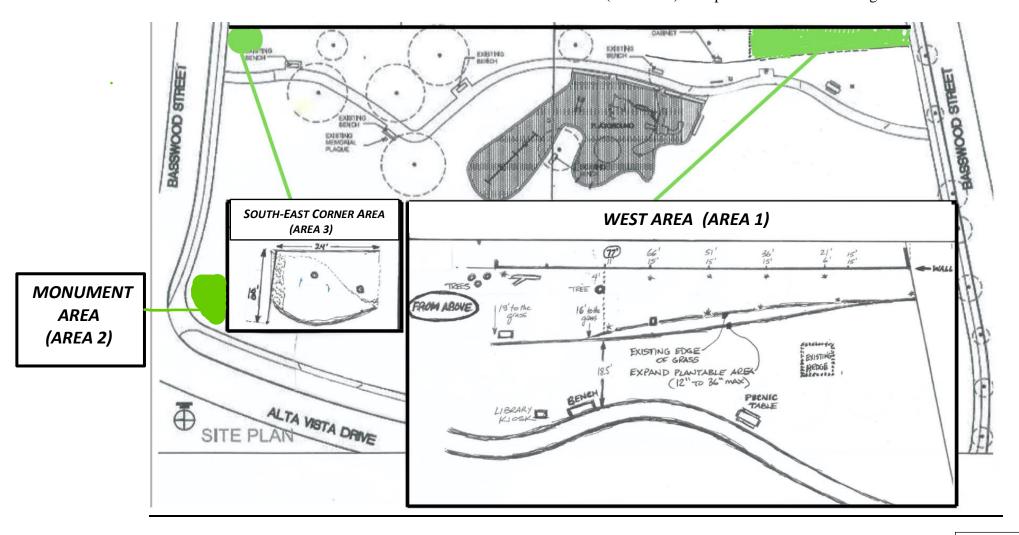
PREVIEW: This photo shows another view of the Monarch Butterfly & Pollinator Garden in Heisler Park (Laguna Beach), including the educational sign with a focus on Monarch Butterflies.



Blue Heron Park - Overview Map showing the whole park, the 'West Area' and the 'East Area'

As shown on the map below:

- **AREA 1** The 'WEST AREA' runs from the west sidewalk (SW corner) to a point that is 77 feet along the back wall.
- **AREA 2** The 'MONUMENT AREA' runs from the east sidewalk (NE corner) near the 'Blue Heron Park' sign.
- **AREA 3** The 'SOUTH-EAST AREA' runs from the east sidewalk (SE corner) to a point that is 24 feet along the back wall.



Blue Heron Park – Planting Concept for 'AREA 1' – the 'WEST AREA'

Location: The 'West Area' runs from the west sidewalk to a point that is 77' along the wall.

<u>Preparation</u> – For this area we will prepare the area for planting by:

* removing the large hedge (from the furthest west point)

* removing the ice plants and any other invasive plants and weeds

* removing a strip of grass (lawn) tapering to 12" in some places and as much as 36" in the middle of the West Area

* adding organic topsoil to either end of the planting area to create slightly raised mounds, in order to add interesting topography to the garden * adding mulch throughout the garden (after the planting has been completed) in order to help retain moisture. (Mulch is also known to

attract Monarch Butterflies more than just soil when milkweed is planted in it – this is based upon the findings of a study).

Accent the garden with White Gravel in two or more small areas:

This garden area will be made to stand out by creating a 'framed effect.' This will be achieved by placing White Gravel at each end of the garden. The result will be to provide interesting contrast for the colors of the garden. Green & white flowering plants will be interspersed in the White Gravel Area and Goldenrods will add some height, all for a nice welcoming effect.

<u>Back of the garden</u> – Emphasize depth with a number of <u>small trees</u> (native trees):

A line of small native trees will run at the back of the garden – creating a hedge effect – adding depth to the garden visually and giving residents privacy. These trees will be spaced four to five feet apart. These trees are selected for their benefit to pollinators and biodiversity – these small trees would be a combination of Lemonade Berry tree, Desert Willow tree, and California Holly Leaf Cherry tree.

* Of course, other types of trees can be considered as we receive additional feedback from you.

Native grass will be planted beneath the trees. Not only does the grass look beautiful, it also provides an important home for pollinators and provides moisture retention for the trees. Lavender and Goldenrods will add height to the back of the garden. Goldenrods are particularly good in a pollinator garden because they are an 'Apex Plant' which means they support the entire food web. They support numerous species of butterflies, bees and insects. They also support birds.

For the main garden area: Smaller plants throughout the garden:

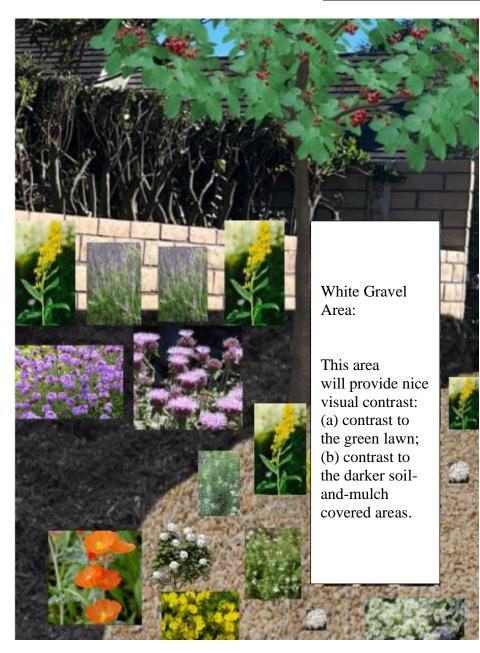
The pollinator habitat planting plan is comprised of both native and non-native plants to create a variation of bloom times throughout the year (plants will be mainly native). This will help to attract different pollinators, including Monarch Butterflies, native bees and hummingbirds. These smaller plants are shown in the photo-illustrations (next page) and are described below (with photos for each type of plant).

Carved-Out Areas:

In addition to the main 'West Area,' we would create two small "carved-out areas" to be planted with similar plants as a burst of color (and great for monarch Butterflies and other pollinators). These two areas would each be approximately 80 square feet. The work involves deep digging to remove the roots of the existing heavy green icy plants (within the two "carved-out areas").

Blue Heron Park – Planting Concept for 'AREA 1' – the 'WEST AREA'





White Gravel Area (Close-Up)

An example style of a 'water wise' garden below. Our planting scheme for this area of the garden will be pollinator focused with flowering plants. This area of the garden serves to highlight the plants and also to highlight waterwise gardening strategy.



Close up of the white gravel to be used in these accent areas.

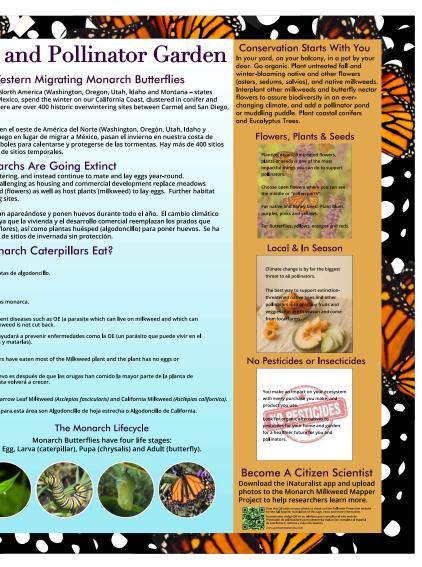


PREVIEW: Educational Sign – Example from parks previously created in Laguna Beach www.protectmonarchs.com

Vhat are pollinators? Monarch Butterfly and Pollinator Garden Bees, butterflies, hummingbirds, wasps, moths, bats, lizards and beetles are all critical pollinators that all transfer pollen California Proudly Hosts Western Migrating Monarch Butterflies from one flower to another as they Western monarchs spend the summer breeding in Western North America (Washington, Oregon, Utah, Idaho and Montana - states collect nectar. west of the Rocky Mountains), then instead of migrating to Mexico, spend the winter on our California Coast, clustered in conifer and eucalyptus trees for warmth and protection from storms. There are over 400 historic overwintering sites between Carmel and San Diego, in addition to temporary sites. Las monarcas occidentales pasan el verano reprodicoéndos en el oeste de América del Norte (Washington, Oregón, Utah, Idaho y Montana - los estados al oeste de las Montañas Rocosas), l uego en lugar de migrar a México, pasan el invierno en nuestra costa de California, agrupadas en árboles de coníferas y eucaliptos árboles para calentarse y protegerse de las tormentas. Hay más de 400 sitios Lady Bug Hummingbird históricos de hibernación entre Carmel y San Diego, además de sitios temporales. ¿Qué son los polinizadores? Western Monarchs Are Going Extinct Abejas, mariposas, colibríes, avispas, Fewer and fewer monarchs seem to be migrating or overwintering, and instead continue to mate and lay eggs year-round. Climate change may be a driver, and migrations are more challenging as housing and commercial development replace meadows polillas, murciélagos, lagartos y that make the journey possible. These meadows provide food (flowers) as well as host plants (milkweed) to lay eggs. Further habitat escarabajos son todos polinizadores loss has occurred from the loss of unprotected overwintering sites. críticos que transfieren polen de una flor a otra a medida que recoger néctar. Parecen estar migrando o invernando, y en su lugar continúan apareándose y ponen huevos durante todo el año. El cambio climático puede ser un motor, y las migraciones son más desafiantes, ya que la vivienda y el desarrollo comercial reemplazan los prados que hacen posible el viaje. Estos prados proporcionan alimento (flores), así como plantas huésped (algodoncillo) para poner huevos. Se ha D producido una mayor pérdida de hábitat debido a la pérdida de sitios de invernada sin protección. Why are pollinators in peril? What Do Monarch Caterpillars Eat? Version of the seasonal of the W Female Monarch Butterflies ay their eggs only on Milkweed plants. cycles and has caused habitat loss and Las mariposas monarca hembras ponen sus huevos sólo en las plantas de algodoncillo. reduced critical pollen proteins in plants. W Milkweed plants are the only plant which Monarch caterpillars eat. W Human encroachment and large-scale Las plantas de algodoncillo son la única planta que comen las orugas monarca. agriculture have led to habitat loss and degradation. W Milkweed plants should be cut back twice a year. This will help prevent diseases such as OE (a parasite which can live on milkweed and which can deform Monarch butterfly wings and kill them). This happens if milkweed is not cut back. 🐭 Pesticide use. Las plantas de algodoncillo deben reducirse dos veces al año. Esto ayudará a prevenir enfermedades como la OE (un parásito que puede vivir en el algodoncillo y que puede deformar las alas de la mariposa monarca y matarlas). The best opportunity to cut milkweed plants back is after caterpillars have eaten most of the Milkweed plant and the plant has no eggs or caterpillars upon it. The plant will regrow. La mejor oportunidad para cortar las plantas de algodoncillo de nuevo es después de que las orugas han comido la mayor parte de la planta de algodoncil o y la planta no tiene huevos u orugas sobre ella. La planta volverá a crecer. 🐭 Plant native California Milkweed species. Examples are California Narrow Leaf Milkweed (Asclepias fascicularis) and California Milkweed (Asclepias californica). ¿Por qué los polinizadores Plante especies nativas de algodoncillo de California. Los ejemplos para esta área son Algodoncillo de hoja estrecha o Algodoncillo de California éstan en peligro? El cambio climático ha alterado los ciclos estacionales y ha provocado la pérdida de hábitat y la reducción de las proteínas críticas del polen en las plantas. 🐱 La invasión humana y la agricultura a gran escala han llevado a la pérdida y MONARCH degradación del hábitat.

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🐱 Uso de pesticidas.



Blue Heron Park - Planting Concept for 'AREA 2' - the 'MONUMENT AREA'

The 'Monument Area' is the area in and around the existing monument-style sign that says "BLUE HERON PARK." In some part(s) of this area (to be confirmed with the Park Committee and the HOA), we will create a Monarch Butterfly and Pollinator Garden using a selection of plants from the list on pages 16-17.

The overall effect will be similar to what is shown in the photo below, with a more specific design on the next page.

Here we would also design and install an **educational sign** (similar to the one shown below), to be installed at a specific location as directed/approved by the HOA. (See also Page 3 for a zoom-in on the educational sign.)







Blue Heron Park – Planting Concept for 'AREA 2' – the 'MONUMENT AREA'

Location: The 'Monument Area' is in the north-east corner of the park – a fairly large area in front of (and to the sides of) the sign that says 'BLUE HERON PARK'

<u>**Preparation**</u> – For this area, we will keep the large Plumbago hedge-trees, and we will prepare the rest of the area for planting by: * removing the ice plants and the existing flowers

* adding a wide strip of light-colored gravel in front of the sign that says 'BLUE HERON PARK'

- * adding organic topsoil to form low mounds on the right and left sides of the gravel area, in order to add interesting topography to the garden
- * adding mulch throughout the garden (after the planting has been completed) in order to help retain moisture. (Mulch is also known to attract Monarch Butterflies more than just soil when milkweed is planted in it this is based upon the findings of a study)

* adding two Desert Willow trees behind, and slightly wider than, the 'BLUE HERON PARK' sign

* removing a small strip of grass from the west side of the Monument Area, near the north sidewalk, and adding soil to this area

<u>Accent</u> the garden with <u>Light-Colored Gravel</u> in a wide strip that runs from the 'BLUE HERON PARK' sign to the corner (as indicated above). This will help the whole garden area stand out more with an interesting contrast for the colors of the garden. It will also make the Monument Area seem to be slightly larger than the current perception effect.

'Sea Thrift' flowering plants will be interspersed in this Light-Colored Gravel Area

These design features will create a nice welcoming effect.

Native grass (a lower-height type of native grass) will be planted beneath the Desert Willow trees. Not only does the grass look beautiful, it also provides an important home for pollinators and provides moisture retention for the trees.

Goldenrods will add height to the back of the garden near the monument sign that says 'BLUE HERON PARK.

Goldenrods are particularly good in a pollinator garden because they are an 'Apex Plant' which means they support the entire food web. They support numerous species of butterflies, bees and insects. They also support birds.

For the main garden area: Smaller plants throughout the garden:

The pollinator habitat planting plan includes both native and non-native plants to create a variation of bloom times throughout the year (plants will be mainly native). This will help to attract different pollinators, including Monarch Butterflies, native bees and hummingbirds. These smaller plants are shown in the photo-illustrations (next page) and are described below (with photos for each type of plant).

Planting Concept for Butterfly Gardens in Two Areas of the Park: 'West Area' and 'North-East Area' *

BUDGET QUOTE

BUDGET 'A' assumes all work completed by PPF

Site Preparation for 'West Area' \$ 5,500 (see Pages 6-12)

* Removing hedge and ice plants in the identified areas;

removing a strip of the lawn; hauling away for authorized disposal;

* Adding soil to the slope while also creating more variation of topography;

* Installing two small areas of White Gravel to add interesting texture and color contrast

Planting – sourcing, selection, transport, further soil preparation, planting \$ 10,000

* Includes the cost of the plants (approximately 230 individual plants);

* Includes the cost of 15 Lemonade Berry trees (5-gal.) for the hedge at the back of the West Area

* Includes the cost of 5 Desert Willow trees for the back of the West Area

* Includes the cost of 2 Holly Leaf Cherry trees for the back of the West Area

* Includes the cost of the White Gravel and eco-friendly membrane for the West Area garden

* Re Maintenance, this includes PPF information and discussion with Nature Care and Committee

* At no additional cost, this includes a PPF presentation to the East Bluff Community Residents

Two other areas ('carved-out areas") on the slope to the east of the Library Kiosk \$ 1,000

* Carve-out of two planting areas (each 80 square feet) on the slope to the east of the Library Kiosk

* One of these "carved-out areas" will be in the shape of a heart, with plants inside that space; the other "carved-out area" would be an ellipse (horizontal) or possibly a rectangle (horizontal)

* Includes the planting for the two correct out areas

* Includes the planting for the two carved-out areas

TOTAL for the 'WEST AREA' \$ 23,800

Planting Concept for Butterfly Gardens in Two Areas of the Park: 'West Area' and 'North-East Area' *

BUDGET QUOTE

BUDGET 'A' assumes all work completed by PPF

Site Preparation for 'Monument Area' \$ (see Pages 13-17)	2,000
* Removing hedge and ice plants in the identified areas; removing a small strip of the lawn (west of the Monument Area); hauling away for authorized disposal;	
* Adding soil to create two mounds, to the left and to the right of the Light-Colored Gravel area, in order to create variation in the topography;	
* Installing the Light-Colored Gravel in the center area of the Monument Garden (in order to add interesting texture and color contrast)	
 Planting – sourcing, selection, transport, further soil preparation, planting	2,800
SUBTOTAL for the MONUMENT AREA' (as above on this page) \$	4,800
Educational Sign to be installed next to the 'Monument Area' garden	2,500
TOTAL for this page\$	7,300
TOTAL for the 'WEST AREA' (previous page) \$1	6,500
	2 000

TOTAL FOR BOTH GARDEN AREAS\$ 23,800

Planting Concept for Butterfly Gardens in Two Areas of the Park: 'West Area' and 'North-East Area' *

BUDGET QUOTE

BUDGET 'B' assumes work completed by PPF <u>and</u> Nature Care

 BUDGET 'B' assumes that the work would be completed by having PPF do most of with Nature Care also involved to do the removal of identified plants, to of a small strips of the lawn as identified, and hauling away for authoric As a result, PPF would not end up incurring certain types of removal c would be some room for adjustment of the total costs. Even though Nature Care would be doing the removal and hauling away PPF would still need to oversee and to be present for most of this time (a) to indicate what has to be removed, and (b) to make sure that the roots are taken away to the greatest extent post. 	the removal ized disposal osts, so there ay,
PREVIOUS TOTAL FOR BOTH GARDEN AREAS (from Page 19)	\$ 23,800
Adjustment for the WEST AREA (with Nature Care doing the following physica * Removing hedge and ice plants in the identified areas; removing a strip of the lawn; hauling away for authorized disposal	ll work): Reduce by \$ 1,000
Adjustment for the MONUMENT AREA (with Nature Care doing the following * Removing hedge and ice plants in the identified areas; removing a small strip of the (west of the Monument Area); hauling away for authorized disposal	·
ADJUSTED TOTAL (SPECIFIC TO PPF) FOR BOTH GARDEN AREAS	\$ 22.400

Planting Concept for Butterfly Gardens in Two Areas of the Park: 'West Area' and 'East Area' *

TIMELINE

Time estimates are expressed as the number of weeks from the start of the Project:

Site Preparation for 'West Area' and 'North-East Area	Week 1 to Week 6
 Planting – sourcing, selection, transport, further soil preparation, planting * Includes the cost of the plants (15 small trees and approximately 155-175 individual plants); * Includes the White Gravel for the West Area garden 	Week 3 to Week 8
Educational Sign for the North-East Area garden	Week 8 to Week 12
 Two other areas ('carved-out areas") on the slope to the east of the Library Kiosk * Carve-out of two planting areas (each 80 square feet) on the slope to the east of the Library Kio * One of these "carved-out areas" will be in the shape of a heart, with plants inside that space; the other "carved-out area" will be an ellipse (horizontal) or possibly a rectangle (horizontal) * Includes the planting for the two carved-out areas 	

FULL PROJECT10 to 14 weeks

SUMMARY

For the East Bluff Community, this project will result in two beautiful garden areas for Monarch Butterflies and Pollinators, with two additional "carved-out areas" as well as an educational sign near the North-East corner of the park. This is great for the community and great for the Monarch Butterfly population!

For the Pollinator Protection Fund (PPF), this project will directly contribute to our highest priorities as an organization:

- 1. HABITAT creating habitat to help support Monarch Butterflies and other pollinators; and
- 2. AWARENESS promoting education and awareness relating to Monarch Butterflies and other pollinators.

This project will also help the Pollinator Protection Fund develop some amount of financial resources which will help the PPF with other habitat-supporting projects. One of those projects is to plant a large area of nectar-producing plants in San Clemente State Park to help the 'overwintering' Monarch Butterflies with their food needs to make it through the winter.

We very much appreciate your support and we look forward to working with you!



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APPENDIX regarding possible 'AREA 3' - FOR CONSIDERATION AS A FUTURE PROJECT

Blue Heron Park – Planting Concept for 'AREA 3' (FUTURE) – the 'SOUTH-EAST CORNER AREA'

<u>Timing</u>: The 'South-East Corner Area' is <u>not</u> proposed for 2022. The 'South-East Corner Area' is included here mainly for discussion as a possible project for the future. (It is our understanding that there is a possibility that the 'South-East Corner Area' might be considered for early 2023 or later in 2023).

Location: The 'South-East Corner Area' runs from the east sidewalk to a point that is 24' to the west, and runs diagonally from the SE corner.

<u>Preparation</u> – For this area we plan to prepare the area for planting by:

- * removing most of the ice plants (while keeping those ice plants that are within 3' of the east sidewalk)
- * removing any other invasive plants and weeds
- * adding organic topsoil where needed
- * adding mulch throughout the garden (after the planting has been completed) in order to help retain moisture. (Mulch is also known to attract Monarch Butterflies more than just soil when milkweed is planted in it this is based upon the findings of a study).

Smaller plants throughout the garden:

The pollinator habitat planting plan is comprised of both native and non-native plants to create a variation of bloom times throughout the year (plants will be mainly native). This will help to attract different pollinators, including Monarch Butterflies, native bees and hummingbirds. These smaller plants are shown in the photo-illustrations (next page) and are described below (with photos for each type of plant).

An arc of yellow California Goldenrods frames the top of this habitat area, adding color, height and depth. Goldenrods are an 'Apex Plant', which means they support the entire food web. They support numerous species of butterflies, bees and insects. They also support birds.

Budget Considerations:

'AREA 3' is a smaller area but is also a fairly steep slope with extensive existing growth to be removed (ice plants). We have previously indicated a budgeted amount of \$2,000 for this work to be completed (preparation and installation, all plants included). Please note that 'AREA 3' is not part of the current discussion because the 'South-East Corner Area' would not start until sometime in 2023.

Timeline Considerations:

We could do the preparation and planting within a three-week period; however it is not under consideration until sometime in 2023.

<u>Blue Heron Park – Planting Concept for 'AREA 3' – the 'EAST AREA' (a possible Future Phase)</u> (approximately 70 plants – see LIST as shown on pages 14-15)

