THE GEORGE ALEXANDER FOUNDATION

TOWARDS ZERO WASTE IN FLORAL DESIGN

An International Specialised Skills Institute Fellowship.

AGA JONES

Sponsored by The George Alexander Foundation

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1. Acknowledgements

The Fellow would like to thank the following individuals and organisations who generously gave their time and their expertise to assist, advise and guide her throughout her George Alexander Foundation Fellowship.

Awarding Body – International Specialised Skills Institute (ISS Institute)

The ISS Institute plays a pivotal role in creating value and opportunity, encouraging new thinking and early adoption of ideas and practice by investing in individuals.

The overarching aim of the ISS Institute is to support the development of a "Smarter Australia". The Institute does this via the provision of Fellowships that provide the opportunity for Australians to undertake international skills development and applied research that will have a positive impact on Australian industry and the broader community.

The International Specialised Skills Institute was founded 28 years ago, by Sir James Gobbo AC, CVO, QC, and former Governor of Victoria, who had a vision of building a community of industry specialists who would lead the up-skilling of the Australian workforce. The Fellowship Program builds shared learning, leadership and innovation across the broad range of industry sectors worked with. Fellows are supported to disseminate learning's and ideas, facilitate change and advocate for best practice through the sharing of their Fellowship learning's with peers, colleagues, government, industry and community.

Since its establishment 28 years ago, ISS Institute has supported over 450 Fellows to undertake research across a wide range of sectors which in turn has led to positive change, the adoption of best practice approaches and new ways of working in Australia.

The Fellowship Programs are led by investment partners and designed in a manner which ensures that the needs and goals desired by the partners are achieved. ISS Institute works closely to develop a Fellowship Program that meets key industry priorities, thus ensuring that the investment made will have lasting impact.

For further information on ISS Institute Fellows, refer to www.issinstitute.org.au

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The Fellow sincerely thanks The George Alexander Foundation for providing funding support for the ISS Institute and for this Fellowship. In 1972, George Alexander AM (1910 - 2008) set up an independent philanthropic Foundation as a way of sharing his wealth and giving back to the community. Today, the main focus of The George Alexander Foundation is access to education for promising young people, particularly students with financial need and those from rural and remote areas.

The George Alexander Foundation (GAF) Scholarship and Fellowship Programs form the core of the foundation's work, operating in partnership with major tertiary institutions, while our Fellowships and other Education grants provide a variety of other unique and challenging educational experiences. George Alexander believed in the notion of 'planting seeds and hoping they grow into pretty big trees'. The programs supported by the Foundation endeavour to support this ideal and as GAF students graduate and go on to contribute to the community, George's legacy and spirit lives on through their achievements. George Alexander came to Australia as a child migrant, and went on to become a mechanic, an entrepreneur and a businessman and later, a generous philanthropist, who held that you do not own the possessions you have, 'you're just minding them'. This philosophy guided him to give during his lifetime and to hope that through his example, he might inspire others to do the same.

Personal Acknowledgements

» Taylor Patterson and the team at Fox Fodder Farm; Tyler, Corrine, Marian and everyone else who made my internship in New York a wonderful experience. Taylor your authentic and sustainable studio is a true example of how to support local farmers and eradicate floral foam. Thanks for inspiring me!

» Ingrid and Brooke at Tin Can Studios. Thanks for having me for the week, I loved working on your big events with your team.

» Jill of Studio Choo East and Anna of Little State Flower Co for your passion for local and seasonal flowers and for demonstrating what a collaborative relationship in flower farming and design can look like.

» Shane Connolly and Flower School New York for your passion for floral foam free design. Thanks you for teaching me some very innovative techniques.

» Pratt Institute and New York Flower School for the excellent lecture on The Beauty and Ethics of Sustainable floral design.

» Nicole Land of Soil and Stem, your inclusive, approachable manner, talent and unique perspective into large scale arrangements. Thank you for teaching me your tricks to create magic.

» Liza Lubell of Garbage Goddess for your drive to make a difference and provide event designers in NYC with a composting solution for responsible breakdown.

» Allison of BWP Floral for your dedication to locally grown US flowers.

» Danielle White of Crofter's Fold for your expertise and encouragement.

2. Executive Summary

The Fellow, Aga Jones undertook the Fellowship to examine the current state of floriculture in Australia with the hope to improve how flowers are purchased, arranged and finally disposed of.

The methods to undertake research were based on skill enhancement via hands on learning, attending lectures, numerous conversations and learning by observation. The Fellow travelled to the USA in late March 2019, at the breaking of Spring in New York City. The Fellowship took the Fellow on an adventure from New York, to Rhode Island and across to Salt Lake City, over a period of four weeks.

The Fellow is a Macedon Ranges florist, who practices from her home studio, which specialises in local, seasonal design for events, weddings and workshops.

The Fellow has worked with plants in a horticultural setting and flowers from her garden for many years and has run her studio based business since 2017. She feels there is much that can and should be improved in the floral industry to make it more sustainable and believes in the importance of educating her sector.

During her Fellowship, the Fellow developed her knowledge of sustainable practices and broadened her practical skills, learnings she now applies when designing large scale arrangements, arbours and structures. The Fellow learnt how to construct these in numerous natural and built environments using locally sourced materials.

The Fellow undertook workshops and internships focused on floral-foam free design and choosing alternative options in floristry.

The Fellow traced the supply chain of flowers in NYC and developed her understanding of what it means to purchase ‘seasonal’ flowers, learning how difficult it is to buy flowers in cooler US seasons.

During her internships, undertaken in New York City, the Fellow explored natural alternatives to floral-foam such as spirea.

The Fellow attended an exciting lecture presented by the New York Flower School, featuring designer Shane Connolly and Emily Thompson, amongst others. The lecture focused on the individual panelist’s view of sustainability within their industry, and how this is considered, implemented and executed.

The Fellow met and spoke with Liza Lubell, aka Garbage Goddess, about composting waste after events and how her business is greening NYC celebrations, one break down at a time. The Fellow also met with local seasonal flower enthusiast and florist, Allison Manne and discussed the reality of purchasing US grown flowers, year-round. Composting was a focus of this Fellowship and NYC composting systems and services were researched and used.

A recurring message that arose from the Fellowship was to return the focus back to the natural environment. To spend more time there, to source locally grown ingredients, and to keep the process simple, letting the individual flower shine. When you appreciate the small things, your focus becomes fine-tuned and your natural environment will have more meaning and in turn, more protection.

Personal impact

The Fellow gained personal benefit through first hand practice, developing her skills, and applying methodology used in other countries, particularly the USA, known for producing some of the world's most respected floral designers. The Fellow believes this could only be done in an authentic setting through undertaking internships, attending lectures, speaking to business people about their entrepreneurial and sustainable ventures, and learning through practical workshops. Doing this, enabled the Fellow to develop skills in constructing arrangements, arbours and various sized installations without the use of floral-foam.

Professional impact

In addition to practical skills development, the Fellow gained in confidence, and influenced by US based floral design, was able to experiment and apply her new knowledge. The Fellow intends to disseminate this knowledge to promote ecologically friendly, nature considerate design in Australia.

The Fellow plans to achieve this via a series of eco workshops, sharing the practical skills learnt in the USA, offering an authentic experience for learners. It is hoped that these workshops will leave the participants feeling inspired to use locally grown flowers for all the health and environmental benefits they embody and empowered to leave floral-foam behind.

The Fellow continues to speak to media and floriculture specific publications about the chemical usage in the industry (and how to avoid these), considering the source through buying local over imported flowers, composting solutions as well as abandoning the use of floral-foam.

Furthermore, the Fellow would like to introduce a consultation service to advise TAFE colleges, florist shops and studios about the benefits of designing without floral-foam and offer lessons in how to achieve successful results using alternative resources.

Sectoral impact

The Fellow believes that the floristry industry should definitely become more environmentally aware and responsible. Through eliminating floral-foam, being considerate of the source of our flowers, and striving to purchase locally grown produce, the industry would become ecologically sustainable and a leading exemplar. The Fellow aims to be a passionate advocate for floral foam-free design and address the agenda to support locally grown flowers ahead of imported flowers that will have health and environmental risks attached. The Fellow will advocate for the use of local and seasonal product above all else, to ensure that Australia retains its cut flower market, bee friendly, chemical free flowers, and composting solutions.

Australian Context

Floristry and floral design in Australian includes the arrangement, display and retailing of cut flowers and foliage. Flowers are used for weddings, funerals, and corporate and gifting events which may require designs involving specialist skills and techniques. There were 2,070 floristry businesses in operation in Australia at the end of 2017-18 and 3,600 florists employed as of May 2017.

Data surrounding the importation of flowers to Australia varies widely from 10% (Australian Bureau of Statistics, 2013) to 40% (Australian Government, 2019). However, it is clear that Australian grown flowers currently dominate the domestic cut flower industry, compared to the USA where 64% of flowers are imports.

After a 2017 review, the Federal Government recently introduced an increase in biosecurity measures on imported flowers which will undergo additional fumigation in their country of origin. These changes mean higher import costs for the sector, which may benefit domestic growers. This also means imported flowers will have a higher chemical residue and be sprayed multiple times, harming the health of the environment, florists and consumers.

Organic waste is the second largest generated by industry and households, representing 24% (12.8 million tonnes). Nearly half (47%) of all waste from households is organic waste.

There have been no official studies published on the environmental impact of floral-foam and very little information can be found about the quantity manufactured and sold. However, information is available that indicates floral-foam to be a potentially carcinogenic, non-degradable, phenol formaldehyde resin. It is used worldwide and most commonly disposed of in landfill. In addition, due to their water holding capabilities, micro plastics of this kind often end up in waterways.

Considerations

» Methods and skills for florists to work towards creating a floral-foam free practice

» Advice, information and client liaison for those using imported flowers

» Education for designers and florists; how to run an eco-ethical business

» Communicating health and environmental risk with clients

» Compost. How to start and run a closed loop business.

Recommendations

The Fellow has made recommendations in three sections.

1. Floral Foam

Ongoing education and awareness is paramount for floral studios and florists. By sharing advice and skills, working collectively and collaboratively, we can bring about local and global change. Following this, it is recommended that current flower school and TAFE curriculum be reviewed in regards to teaching methods involving floral-foam.

2. Local and Seasonal flowers

Think about where your flowers have travelled from. Get out into nature and connect with a basic human need. Visit your local grower and foster an important relationship. This scope of activities will render a connectedness to one's environment, a respect for nature and stronger local business.

3. Compost

Seek out and find your local composting options or begin a business composting system. Consider the journey taken to grow a flower from seed to cultivation, harvest, design, presentation and enjoyment, and finally compost. Endeavour to keep this system in sync with its natural rhythm of a closed ecological loop. In this system there is no landfill. In order to live sustainably we need to start thinking and working in this manner.

Images: Flowers and clay workshop with Taylor Patterson of Fox Fodder Farm and ceramicist Simone Bodmer Turner.

The mechanics behind the floral design. Foam free at Ulla Johnston boutique with Fox Fodder Farm, NYC.

Upper East Side delivering weekly arrangements with Fox Fodder Farm, NYC

3. Fellowship Background

Fellowship context

The aim of the Fellowship was to highlight the darker side of the floral industry, and bring awareness to industry professionals, designers, growers and clients, whilst empowering florists with the skills to create beautiful installations without the need for floral-foam.

Many flowers used in Australia are imported from countries such as Kenya and Ecuador and designers aren't aware of their origins, chemical treatments or the biosecurity measure taken upon importation. The Fellow was keen to explore why locally grown is better for individual health, environmental health and the local economy. Therefore, design using local and seasonal product is identified, and the symbiotic relationship between a grower and florist recognised with the hope to connect florists with growers and streamline purchasing, so that it can increase in scale throughout Australia.

The floral industry is known to generate much event waste, most often disposed of into landfill. This irresponsible disposal and lack of composting within the industry is the final area the Fellow investigated.

The Fellowship objective was to give professionals and clients more knowledge about the flowers they purchase and use daily. These flowers that are purchased, or are seen at an event may be beautiful but they have likely been sprayed with a myriad of toxic chemicals, travelled thousands of miles, are wedged into non-degradable floral-foam and will most likely end up in landfill.

The Fellowship aim is to make the floral industry more environmentally friendly by:

1. Educating florists about the world's best practice to eradicate floral-foam from their designs

2. Encourage strong relationships between flower farmers and florists in the Macedon Ranges and beyond. To connect, support and increase local purchasing of seasonal flowers and empower sustainable business in our industry and the broader community.

3. To research and learn about compost application in a large city

Whilst in the USA, the Fellow aims to learn from industry leaders about sustainable practices in floral design and innovation in foam free design. The Fellow endeavors to study successful farm-to-florist networks in the USA, which she hopes will influence the development of similar networks in Australia.

The Fellowship is important and relevant to the Australian floral industry as it will provide florists hands on skills to eliminate floral-foam from their designs. This will reduce the overall industry reliance upon the petrochemical. The Fellowship findings aim to aid in the establishment of a collaborative hub for buying and selling local flowers and offer networking opportunities.

On her return from the US, the Fellow aims to disseminate knowledge via a series of workshops, presentations and conversations with focus on foam free design. In addition, in collaboration with Consortium Botanicus, design a framework to connect and support sustainable business between florists and farmers.

Fellowship Methodology

The Fellowship took place over four weeks with the Fellow completing:

» An Internship at Fox Fodder Farm, NYC

» An Internship at Tin Can Studios, Brooklyn

» A collaborative workshop with Fox Fodder farm and Simone Bodmer Turner

» Lecture by Pratt Institute and Flower School New York: Beauty and Ethics: The Art of Sustainability

» Large scale urn Workshop with Shane Connolly at Flower School New York

» Local and seasonal flower Workshop with Studio Choo East and Little State Flower Co, Rhode Island

» Installation and arbour workshop with Nicole Land at Soil and Stem, Utah

The Fellow collected information in three categories:

» Floral-foam free design and construction using alternative materials

» Observation about possibilities for increased local flower purchasing

» Composting solutions undertaken in NYC

The methods applied in these learnings focused on skills enhancement via internships, workshops and lectures. The two internships focused on workplace immersion where the fellow learnt by taking part in daily goings on. The fellow took part in all activities with studio staff such as purchasing flowers at the New York Flower market, attending meetings, commercial flower installations, processing flowers onsite, and deliveries.

During the second internship, the Fellow predominantly worked at the studio in preparation for a large event, creating hundreds of small foliage arrangements and working on a hanging installation.

The four workshops undertaken were focused on skill enhancement via immersion and hands on in situ application.

The Fellow at Tin Can Studios during a four day inter- studio experience in Brooklyn, NYC.

Arranging flowers with Fox Fodder Farm for one of their many commercial clients, with a view of the Empire State building, NYC.

Fellowship Period

The Fellowship was undertaken between March 22nd and April 22nd 2019.

Fellow Biography

The Fellow, Aga Jones, is a studio based floral designer based in the Macedon Ranges in Victoria. The Fellow began her business Aga Jones Flowers in 2017 and designs for weddings and events, and conducts regular workshops to educate clients on how to design with flowers and do so in an environmentally sensitive manner. She applies a zero waste approach to her designs. The Fellow's work is focused on sourcing locally grown and in season flowers, composting green waste and using alternatives to floral foam.

Qualifications

» Postgraduate Diploma Environmental Management (2014) UTAS, Tasmania

» Bachelor Industrial Design (2007) RMIT, Melbourne

Roles

» Aga Jones Flowers- (2017) Founder

» Member Consortium Botanicus (2017)

Media and Achievements

» Growers and florists urge consumers to be aware of chemical use in cut-flower industry (2019) - ABC.net.au

» On a mission- Sustainable floral design (2018) - The Flowerpress Blog

» Florapreneur- On a mission towards sustainable flower design (2018) - Oak Magazine

» 'Stronger Together', Florist and farmer collaborative lunch with speaker Lindsey Myra - 2018

Abbreviations/ Acronyms / Definitions

Floral-foam: A phenol formaldehyde resin designed in the 1950's and used across the floral industry for its unique ability to hold water, provide support in floral arrangements, and prolong the life of flowers. However, floral foam is non-degradable, potentially carcinogenic and a major contributor to plastic in landfill and in our waterways.

Spirea: genus of nearly 100 species of flowering shrubs in the rose family (Rosaceae), which are native to the Northern Hemisphere.

The Fellow with her complete large urn arrangement.

4. Fellowship Learnings

Themes

» Floral-foam free large scale design

» Focus on florist/ grower relationships enabling local flower purchasing

» Composting solutions for florists and event spaces

Skills enhancements

» How to create an extra-large urn design

» How to construct a foam free arbour

» How to construct a natural hanging installation

» How to create a growing garden installation

» Holding stems securely without floral foam

Observations and Research

» What does sustainable mean to floral designers in the US?

» What does a sustainable floral business in the US look like?

» Is it possible to buy only locally grown flowers in NYC?

» How can purchasing of local flowers be improved?

» Waste management, primarily composting solutions in New York city.

Theme: Floral foam free large scale design

Designing without floral-foam, as was the norm before its introduction in the 1950's, is a creative, exciting and environmentally favored alternative. In Australia, design with floral-foam is still taught at floral schools and TAFEs and is widely accepted as a necessary component of floral design. The use of floral-foam is current practice in the USA. A growing social media movement (@nofloralfoam), and awareness of the environmental and health concerns associated with floral foam has aided in florists and consumers becoming more mindful of the decisions they make surrounding its use.

The Fellow took part in several workshops in New York and Salt Lake City which demonstrated the unique ability to create very large, sometimes gravity defying designs, without the need for floral-foam. The Fellow became versed in contemporary, environmentally friendly design techniques including large urn installations, arbour construction, a growing garden installation and a natural hanging installation. These methods resulted in sustainable, foam free floral designs that appear exactly the same as those constructed with floral-foam.

Skill Enhancement 1.

Floral foam free large scale design: Large Urn
How to design and construct an extra-large urn installation.

» What mechanics are used?

» How is the design constructed?

» Longevity of design

» Flora used.

Action

Undertake workshop at the Flower School New York with master florist Shane Connolly, New York.

Shane Connolly holds a Royal Warrant of Appointment to HRH The Prince of Wales. The mechanics Connolly employed in his designs were surprisingly creative. He began with selecting an urn. Into this urn he placed a standard black bucket with pre-set concrete that held a birch branch about 1.2m tall. This was a small- medium branch with no other limbs.

Surrounding the branch were three medium vases which were also concreted into place. These were additional water holding vessels.

Using cable ties, Connolly attached several conal shaped plastic tubes to the branch. The structure had about four cones attached and Connolly proceeded to wrap the entire structure from base to top (encasing the cones) in chicken wire, which was again secured with cable ties.

This formed the basis of the design.

As it was Spring in New York, large cherry and quince branches were available and used for the urn installation, being placed through the chicken wire and into the attached vessels.

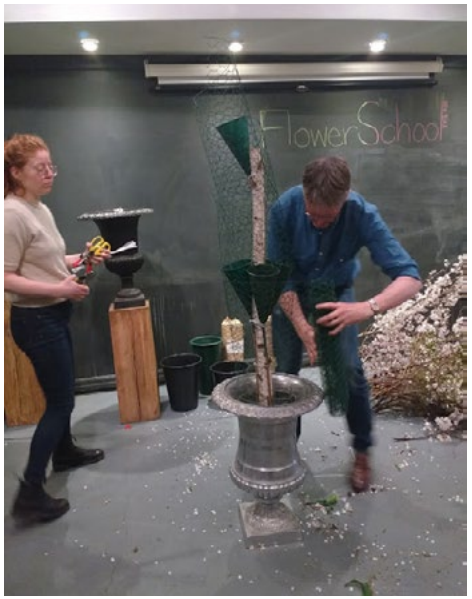
Branches were also placed into the vases at the base. The design was built upon until all the mechanics (chicken wire, conal plastic) had been hidden and become invisible to the viewer.

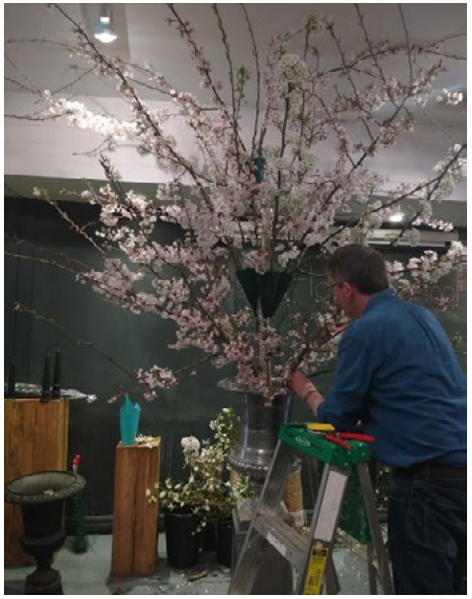
Due to their hardy nature and longevity out of water, vines and green foliage such as asparagus fern were added to hide the chicken wire.

To conclude the design, focal flowers such as hyacinth and tulips were placed into the conal shaped tubes to draw the eye to certain areas of this elaborate, whimsical and stately design.

This type of floral design would be employed for event work, lasting 1-2 days.

Images (left): Base of the large urn design. Vases surrounded by a birch branch all concreted into a bucket, (right): Funnels called cemetary vases are attached to the birch branch using cable ties.



Images (top far left): Additional funnels are added to give the designer more placement options. (top left): Once the funnels are attached, chicken wire is wrapped around the structure to keep everything secure. This is fastened with cable ties. Water is added. (bottom left): Floral Designer, Shane Connolly begins his arrangement from the top. (bottom right): The largest branches are added first to create form and structure. (top right): The funnels and voids in the design are disguised by using an evergreen creeper, usually something that will last out of water. (top far right): The large urn is then filled with focal flowers; tulips in this case. These are placed directly into the funnels and held taught by the chicken wire structure.

Skill Enhancement 2.

Floral foam free large scale design: Arbour
How to construct a foam free arbour.

» What is used to contain water?

» What structure is used?

» Placement of water sources

» How to disguise the base

Action
Undertake workshop with Nicole Land of Soil and Stem, Salt Lake City, Utah.

Nicole Land of Soil and Stem had a custom made arbour, designed to suit her requirements of weight, size, flower placement capability and shape.

The reo mesh sheet arbour was made from one sheet of steel reinforcing mesh (which had rusted) and had a natural patina. The arbour was stabilized by timber feet, which then had two additional timber pieces for added balance.

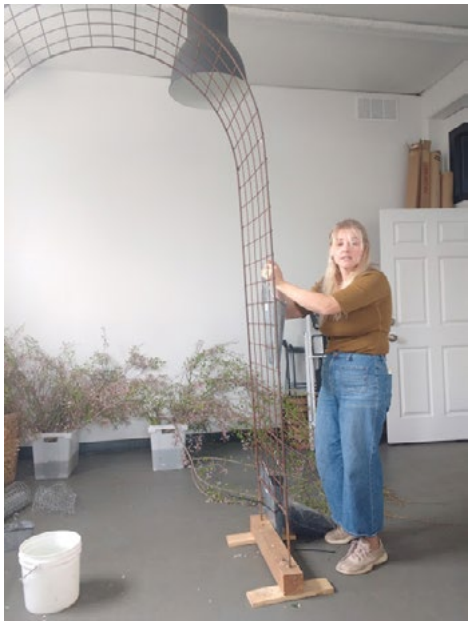
Nicole Land had several flat backed, tin water vessels, into which she placed scrunched chicken wire in preparation for water (and flowers). These vessels were purchased from a craft store and silicon was used to make them water tight.

These were arranged symmetrically on the arbour, but each one placed slightly off kilter. Two were placed at the base of the arbour, one on the left, the other on the right side, facing out. Two more flat backed vessels were added mid-way up the arbour and two smaller ones attached with cable ties at the beginning of the curve on the arbour, near the peak.

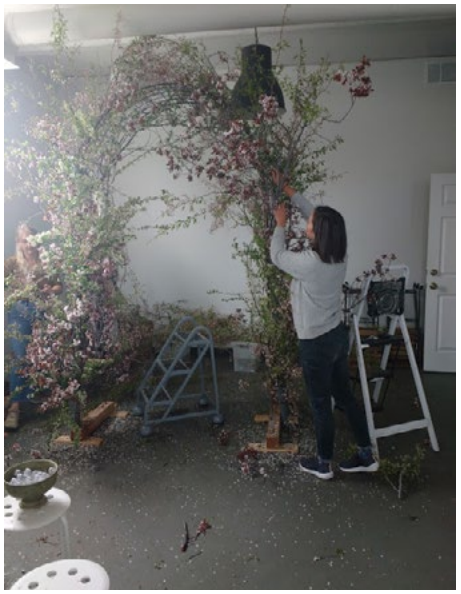
The vessels were then filled with water and each had chicken wire inserted prior to being attached.

Again, Spring branches, mainly wild cherry were used to adorn the arbour and these were placed coherently into the vessels, creating an organic yet easy to follow path around the arbour. Branches which could not reach or were placed internally had their own reusable, plastic water tube. These were disguised with other branches.

The arbour was completed by pruning out unnecessary branches and the base was disguised by a growing installation discussed in Skill Enhancement 4.



Images (left): Nicole Land designer at Soil and Stem explains about purpose and stability when designing an arbour. (right): Flat backed craft vessels, sealed with silicone are cable tied to the arbour structure to act as vases.



Images (top left): Chicken wire is rolled and placed inside the vessel to hold stems in place. (bottom left): Six vessels in total are added to the structure. These will be the main water holding recepticles. (top right): Nicole Land begins to add flowering branches which flow naturally around the arbour. (bottom right): Flowering branches are a added to all six vessels, filling any voids in the arbour, as well as disguising the vessels.

Skill Enhancement 3.

Floral foam free large scale design: hanging installation
How to construct a natural hanging installation.

» What construction methods are used?

» Materials and tools needed

» Placement

Action
Undertake workshop with Nicole Land of Soil and Stem, Salt Lake City, Utah.

Undertake internship with Tin Can Studios, Brooklyn, NY.

Both construction methods for the hanging installations were quite different due to venue, material, the object being suspended and weight.

Nicole Land of Soil and Stem used a rigging system of cable wire attached to either end of the studio space. This cable wire intersects the cross wire, forming an ‘X’ in the centre. It is here that the chicken wire, trellis or other hanging base is attached, using cable ties.

Land recommended using four points of contact to enable the hanging installation to remain still.

Chicken wire should not be used as a stabilizer for anything heavier than 45 kilograms.

Once the rigging had been attached and there were four stable contact points, a large mass of chicken wire was added to the cable wire, again attached with cable ties. This resembled a floating cloud. The chicken wire 'cage' was filled with local dried grasses which had been foraged by Land. These were gathered in bunches and artistically layered and woven through the chicken wire to create a circular form, suspended overhead, resembling a nest. Some of the grasses were tied together using natural materials such as jute or grass to ensure that they would not come loose and fall out.

This suspended design can be replicated using live plants, foliage and cut flowers, or if weight is a consideration, a combination of dry and cut. Cut flowers can be tucked into areas of the suspended design in small vessels or water tubes and be secured by cable ties or florists wire encased in jute.

Images (left): Cable wire is attached to four points. A chicken wire construction is threaded through the centre and stabilized. (right): Dried grasses are threaded through the chicken wire to create a nest like structure.

(top): The grass is secured using wire and jute and ties and woven into place. (bottom): The finished nest appears to be floating and ethereal.

Skill Enhancement 4.

Floral foam free large scale design: growing garden installation
How to create a growing garden installation.

» What are the methods of construction?

» How to achieve height

» What ingredients to use?

Action
Undertake workshop with Nicole Land of Soil and Stem, Salt Lake City, Utah.

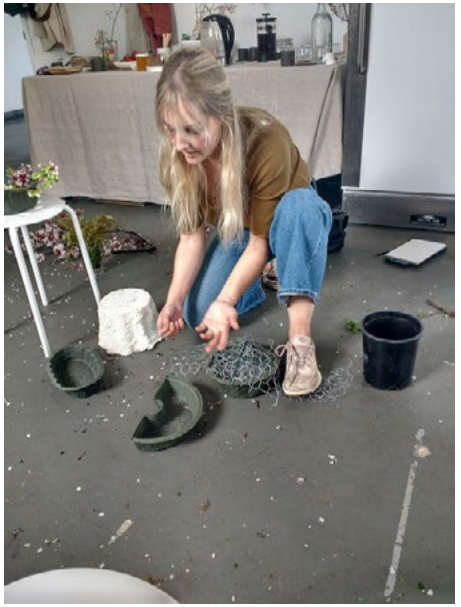
To hide the feet on the arbour installation (skill enhancement 2), a growing garden installation was designed. This design, whether used indoors or outdoors, is created to enhance the overall arrangement. This brings a sense of naturalness and continuity to the space and installation.

The design was made organically and created using a combination of waterproof papier mache trays and beautiful, weathered terracotta pots. Live flowers such a foxgloves and ferns were potted whole into attractive pots, topped with moss for added impact. A combination of blossoms, foliage and foxgloves were used in the chicken wire lined papier mache trays to create a natural looking garden to complement what had been planted and the blossoms used in the arbour design.

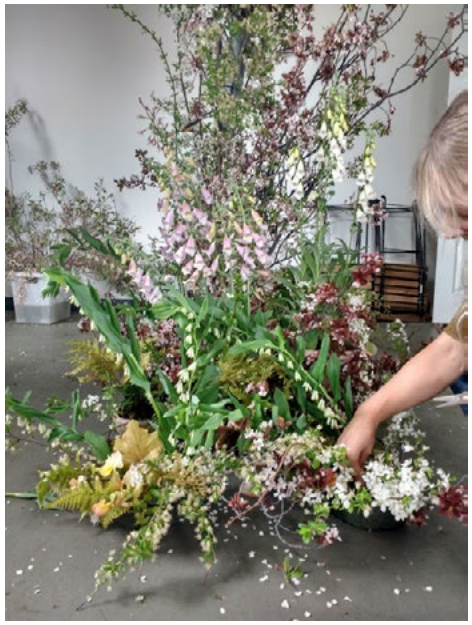
The mixed array of tray arrangements and potted plants were positioned organically at the foot of the arbour to hide the mechanics (such as water vessels) and to disguise the timber base on either side.

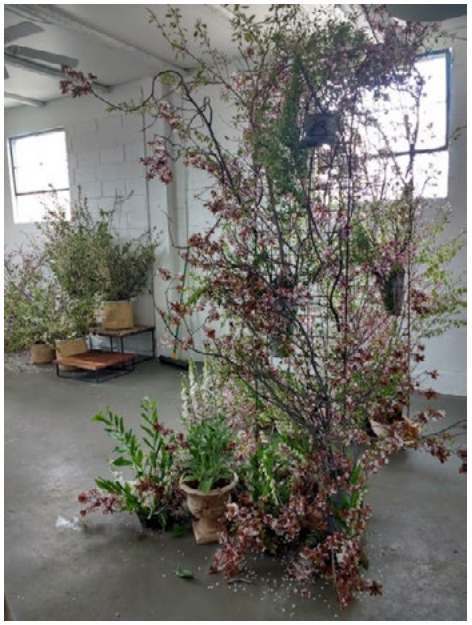
The finished look was an extension of the arbour, which spilled into the studio. In an outdoor scenario, this installation would blend in and appear to be part of the landscape.

Height and depth can be created by layering and repetition of materials for a naturalized look.



Images (left): Chicken wire is folded into low lying dishes made from papier mache. Note: These are water tight. (right): Terracotta pots are used to pot up nursery bought plants, which are added to the growing garden.





(top left): Small floral arrangments are constructed in the papier mache dishes. (top right): The terracotta pots and papier mache dishes are arrnaged together at the feet of the arbour, hiding mechanics. (bottom left): The finished growing garden installation.

A growing installation can be replicated in a number of ways; down the aisle, as a low table centrepiece, growing in an unnatural space, bringing a grown garden indoors.

Skill Enhancement 5.

Floral foam free large scale design: vase arrangement sans chicken wire
How to hold stems securely without floral foam.

» What are the mechanics?

» What can we use in Australia vs what was demonstrated in the US?

» Where is this applicable?

Action
Undertake workshop with Jill Rizzo of Studio Choo and Little State Flower Farm, Rhode Island.

Undertake Internship at Fox Fodder Farm and learn via observation.

The designers working at both locations provided the Fellow with examples of how to hold stems without the need for chicken wire. Though chicken wire is a handy alternative to floral-foam, it is best used in event situations where vases have been loaned and must be returned to the designer. If the arrangement is for dispatch and designed as a gift, or intended as a compostable alternative to chicken wire, stems or vines can be used to hold flowers in an arrangement.

The first method taught by Jill Rizzo of Studio Choo was to use large, sturdy branches when designing first. These should be placed at a wide angle, where they fit snugly to the base of the vessel or vase. Place the second branch or supportive stem away from the first branch, creating a natural ‘V’ shape. Jiggle these stems until they sit taught and firm in the vessel. Their cross sections allow

for a natural grid, into which foliage and flowers can be arranged and kept in the desired position.

The second method learned at Fox Fodder Farm was using the bush spirea, stripped of its flowers and foliage to create a sphere in the vessels base that will hold and support the stems. These frames are made from the continuous coiling and wrapping of the spirea twig which is self-supporting in the vessel as well as providing a sturdy support to the stems placed inside, as part of an arrangement.

Once the flowers have decomposed, the entire arrangement, including the spirea (or vine/ twigs/ branches) can be composted and the vase reused. These methods ensure less human made material is used in floristry and more natural, biodegradable components are placed together.

An Australian alternative to spirea is grape vine, hardenbergia any other thin, flexible, malleable branch.

Images (left): Step One. Chicken wire free design in vessel. (centre): Step 2. Spirea is added to the vessel as a bioderadable support for stems. (right): Step 3. Vessel with spirea. Natural material, 100% biodegradable.

Key findings

The Fellow believes that learning the methods of construction employed by floral designers, particularly in the supportive structures used in foam free arrangements, is paramount to the success of such sustainable designs. Floral-foam can be totally avoided and replaced by environmentally friendly, creative solutions such as the appropriate vessel, vine or twig, live plants, cut flowers, chicken wire, water tubes and rigging tools such as catenary wire. Floral-foam is a convenient and easily accessible product, however, as demonstrated, is unnecessary and should not be used across the floral industry. Floral design involving reusable and natural materials is creative, exciting and sustainable, and should be encouraged.

Benefit to Australia

It is common knowledge that non-biodegradable materials such as those found in floral-foam are contributing to the devastating impact of plastic pollutants globally. Floral-foam free skills and application are being embraced, championed by groups of florists around the world (such as the @nofloralfoam movement) endeavoring to change methodology, and open a dialogue surrounding the environmental impact of the floral industry. “Every piece of plastic ever created still exists in some form today, whether whole or broken down into smaller, unidentifiable pieces” (World Wildlife Fund, 2019).

As an industry we can and must do better to protect our environmental sovereignty.

Observations and Research

» What does sustainable mean to floral designers in the US?

» What does a sustainable floral business in the US look like?

» Is it possible to buy only locally grown flowers in NYC?

» How can purchasing of local flowers be improved?

Action
Conversation with staff at Fox Fodder Farm.

Conversation with Ingrid Carozzi at Tin Can Studios.

Conversation with Allison Manne of BWP Floral- NYC.

Attend lecture (a collaboration between Pratt Institute and Flower School New York) Beauty and Ethics- The Art of Sustainability – NYC.

Undertake workshop with Jill Rizzo of Studio Choo and Little State Flower Farm, Rhode Island.

Key findings

Sustainability in floristry is open to individual interpretation. The Fellow took part in two, four day internships at acclaimed sustainable floral studios Fox Fodder Farm and Tin Can Studios in New York City in order to explore some interpretations. Each studio had a unique perspective on being eco-friendly. (The Fellow found these lines were sometimes blurred and that wording used in print differed/ was more eco-friendly than the actions taken in situ).

The Fellow found Fox Fodder Farm to be a business that cares for environmental sustainability, staff morale and speaking out about industry waste products like floral-foam. This studio purchased local flowers where possible, composted all green waste on site, did not use floral-foam and had opted to stop buying dyed flowers.

Locally grown flowers were scarce in New York City during March. According to the Society of American Florists, imported flowers account for approximately 64 percent of fresh-cut flowers sold by dollar volume in the U.S. Of the fresh-cut flowers exchanging hands in New York's flower district, the vast majority are imported.

Images (left): NYC Flower Market with Tin Can Studios, NYC, (right): Large seasonal installation at the Caldwell Factory with Tin Can Studios, NYC

Flowers available at West 28th St flower market were mostly imports from Japan, Colombia and Holland. The local flowers available were predominantly grown by New Jersey farm 'Hautau' and flowering branches were sourced within the US. The Fellow discovered that many of the varieties available are locally grown during late Spring and Summer in New York.

During seasons outside of Summer, most of New York's flowers are imported, with 78% originating from Colombia.

Images (top left): Early morning view of NYC Flower Market, on West 28th St., (top right): Inside flower wholesaler Dutch Flower Line, NYC Flower Market, (bottom left): On West 28th St, florist carrying flowers, NYC, (bottom right): Sprayed, dyed and bleached flowers are all the rage in NYC, adding to a growing chemical list which imported flowers are susceptible to, NYC Flower Market, NYC.

Allison Manne of BWP Floral is a floral designer who uses only US grown flowers, a task she admits is indeed challenging. Manne purchases locally grown flowers at Union Square Farmers market, which operates four days per week, all year round.

Manne is a Slow Flowers member and mentioned that this supportive network always provides options and ideas for local flower purchasing, such a greenhouse roses grown in California during cooler seasons.

The Fellow observed a unique relationship between Jill Rizzo of Studio Choo and Anna Kocon of Little State Flower farm. Based in Rhode Island, the pair work collaboratively. Floral designer Rizzo is happy to purchase flowers which are identified as imperfect by other florists. This flexibility and ability to use all blooms allows Kocon to sell the majority of her stock, not just the typical white, green and blush palette which appeals to the Newport, Rhode Island market. Together the pair have purchased a local farm where they will continue to work collaboratively to not only supply Rizzo's studio, but to flower weddings in Kocon's burgeoning 'locals only' event business.

Earth Day Workshop with Studio Choo, Rhode Island.

In New York, the Fellow attended Beauty and Ethics- The Art of Sustainability where floral designers Shane Connolly, Emily Thompson and Andrea J Filippone spoke about sustainability in design. The key environmental issues in floristry identified by Connolly were:

» Quantity

» Floral-foam

» Seasonality

» Chemical usage

The question posed by Connolly asked; how do designers make money and be sustainable? His advice to designers was to get back to basics and be considerate of the source: nature.

“Get your hands in the earth and you’ll be a better floral designer”- Shane Connolly.

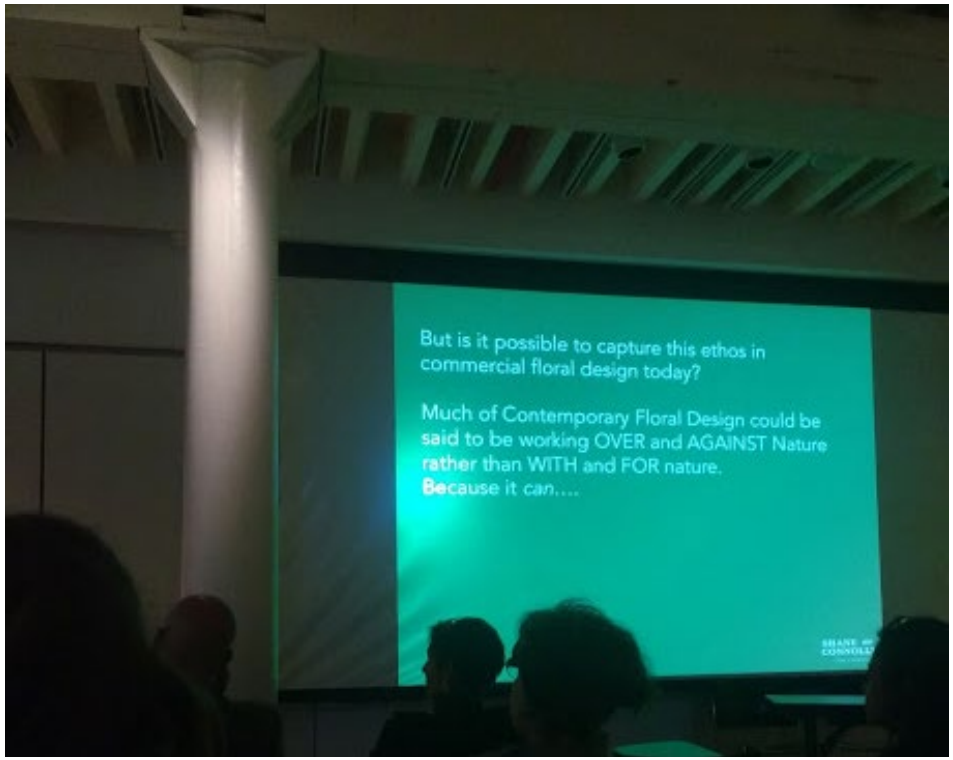
Emily Thompson viewed her role as a floral designer as someone who could ‘draw eyes to the living world’ and through such appreciation of nature, convince her clients of the value of her work. ‘They are not products, they are alive’.

Landscape designer Andrea J Filippone concluded that we, the designers and florists, need to establish a standard within industry and force the rise of that standard.

Earth Day Workshop with Studio Choo aand Little State Flower Farm- Rhode Island (credit: Maaike Bernstrom Photography)

Benefit to Australia

The Australian floral sector continues to observe overseas florists in the USA and UK for more than the latest trends in flower arranging. When popular and highly regarded florists are buying local, composting and saying ‘no’ to floral-foam, other florists, designers, wholesalers and clients listen. This shift towards favoring smaller scale productions, utilizing local farming and seasonal flowers, a desire to be environmentally sensitive, and to compost natural waste products is driving visible change within the industry. This is far more important than any purely aesthetic trends in floristry, it provides an opportunity to reinvigorate the industry, and take the lead in becoming collectively eco-friendly.



Flower School New York and Pratt Institute lecture about Sustainable Floristry, NYC.

Research findings

» What composting options are available to florists in NYC?

Action
Consult with Liza Lubell of Garbage Goddess.

Speak to staff at Fox Fodder Farm.

Key findings

Before embarking on her Fellowship, the Fellow located a Melbourne based composting organization, Compost Collectors, that work directly with florists, landscapers and restaurants to break down green matter. Similar to the closed loop Melbourne based composting model, there are composting companies in New York that provide and pick up wheelie bins weekly (one was used by Fox Fodder Farm (FFF)).

The bins are taken to a processing facility and the compost is returned to the earth. This enables all in studio waste at FFF to be composted, assuring that no green waste contributes to landfill. The Fellow met with florist and entrepreneur Liza Lubell of Garbage Goddess who runs a composting and event break down company. Her goal is focused on working towards zero waste floral events in NYC, the Hamptons and is soon to launch in Los Angeles. After an event in New York, Lubell's team arrives onsite, separates flowers from floral foam, sprayed flowers and chicken wire, and takes all compostable flora to a site on Long Island where the green waste is processed. Many large floral designers are now working with Garbage Goddess, to not only reduce their carbon footprint, but to green their business and credentials.

Lubell is currently sourcing solutions to further eliminate green waste from on site installations, where the Fellow observed cuttings, branches and used flowers being regularly disposed of conventionally, thus contributing to landfill. This is due to a number of difficulties including waste transportation, laziness, and a lack of facilities. The Fellow and Lubell agreed that there must be a way to eliminate this unnecessary waste. Garbage Goddess was seeking a sustainable solution by Spring 2019.

Benefit to Australia

Without reinventing the wheel, Australian floral designers should make use of composting facilities in their local area, use their green bin or make use of a domestic compost bin for their shop and event waste. The biggest benefit and application this topic could have in Australia is ongoing conversation around waste management, reduction and closed loop floristry. The goal being ‘zero waste floristry’, with all green waste being managed effectively, composted and returned to the earth to grow further flowers and foliage.

5. Personal, Professional and Sectoral impact

Personal Impact

Undertaking this Fellowship was a journey that answered many questions, challenged creativity, pushed boundaries, and explored fantastic cities where the Fellow gained new skills and understanding. She returned with a restored confidence and belief in herself.

The Fellowship enabled the Fellow to connect with inspiring, like minded floral designers who are practicing in the US, and make connections with people across the globe. The practical skills she attained abroad are invaluable, and the Fellow feels able to practice and share these with confidence, undertake larger floral projects, and apply new knowledge and skills in the Australian context.

As an industry newcomer, the Fellow feels a sense of legitimacy after her extensive travel and training with some of the world's leading and most sought after floral designers.

Professional Impact

The Fellow is currently planning a series of eco workshops to share the hands on and practical skills gained in the USA. These workshops will leave participants feeling empowered to leave floral-foam behind, and inspired to use locally grown flowers for all the health and environmental benefits they embody.

The first workshop planned is the Mindfully Wed Workshop to be held on Tuesday September 24th, 2019. The workshop is aimed at wedding industry professionals, with a particular interest in flowers. Areas covered will include:

» How to run an ecological business

» Presentations from industry professionals

» No floral-foam demonstration and group installation

The Fellow continues to speak to media and floriculture related organizations about the chemical usage in the industry (and how to avoid these), consider the source through buying local over imported flowers, composting solutions, and discontinuing the use of floral-foam. Most recently the Fellow spoke with the ABC about chemical use in the cut flower industry, local flowers and alternatives to floral foam, (see link in Appendices).

The Fellow would like to help foster a community based flower hub where growers of the Macedon Ranges and surrounding areas are able to meet weekly and sell surplus stock and orders. The benefits of establishing this hub would include enabling florists to support local growers without having to travel to Melbourne Flower Market (less flower miles), and create a more supportive network of florists and growers working together. The Fellow intends to develop a pilot model with the ability to grow regionally.

Furthermore, the Fellow would like to offer a consultation service which advises TAFE colleges, florist shops and studios about the benefits of designing without floral-foam, and offer lessons in how to do this. The benefit of teaching these skills at a TAFE level would enable floristry students to arm themselves with new skills, and to not accept floral-foam as the 'go to' or normal method used by practicing florists moving forward. The Fellow views this consultation service as contributing to industry best practice, and develop a 'prevention being better than the cure' model.

Sectoral Impact

The Australian floristry sector can indeed be more environmentally aware and active. By eliminating floral-foam and being considerate of the source of our flowers, whilst striving to purchase locally grown produce, the industry would be more ecologically sustainable and a leading exemplar.

This action would also result in organizations such as Consortium Botanicus, an Australian collaboration between growers of local and holistic flowers and their clientele, having more expertly skilled practitioners on their team and database.

The Fellowship has also fostered new relationships between Australian and American floral designers, providing opportunities for future collaborations.

The ongoing responsibility of the Fellowship will be to promote environmentally friendly methods of growing, purchase and practice in order to provide a better understanding of our environment, nature, seasonality and cycles, creating an industry-wide ecological stewardship and sense of responsibility.

Images (top): The team at Fox Fodder Farm and the Fellow, (centre), NYC. (right): The Fellow and the Master florist Shane Connolly and NYC florist Allison Cooper.

6. Recommendations and Considerations

1. Floral-Foam Free

It is recommended that current flower school and TAFE curriculum be reviewed in regards to teaching methods involving floral-foam. In order to reduce waste in our industry we must engage in proactive educational methodology, beginning with our classrooms. The risks and adverse effects must be made known to students so that they are best equipped to make responsible choices for their own health and the health of the planet. Ongoing education and awareness is paramount at floral studios and florists. By sharing advice and skills, working collectively and collaboratively, we can make a change locally and globally.

The Fellow acknowledges that active conversation and demonstration will have a flow on effect within industry and amongst peers. Seek information, seek alternatives and be brave in your choices and design. For more information see Sustainable Floristry Network (details in Appendices).

2. Local and Seasonal

Meet your grower and get your hands in the dirt. Thinking local is about more than just where our food comes from, it affects selecting the best flowers too. It's the active choices made by producers and consumers alike that will impact local jobs, economy, environment and purchasing culture.

By travelling to a local grower and purchasing flowers at the farm gate, florists will feel more connected with district businesses, in tune with seasonality, see the greater impacts their dollar has in the community and support a business which is ecologically sound.

Florist and farmer connections are vital to successful Australian floriculture, with more and more flowers being imported and sprayed with chemicals that replace local product with flowers which have travelled thousands of miles.

Florists are encouraged to ask:

» Is it chemical free and bee friendly?

» What's in season?

» Where was it grown?

» Can I visit your farm?

» Ask for what they would like grown or grow your own

By conversing with your local grower, we can reduce the reliance on imported and sprayed flowers, promote local agriculture and support Australian business. These relationships are fundamental to a successful, holistic floral design business. For more information see Consortium Botanicus (details in Appendices).

Inside a flower wholesaler, most flowers sold are imports from Colombia, NYC Flower Market, NYC.

3. Compost

Seek out and find your local composting options. Whether your business is located in the city or in a rural area there will be a range of options available, from bin pick-up/ drop off services, sites where you can drop off your local green bin* and composting onsite.

Your local hardware or council will have information and product availability. Consider the source of your flowers. Soil. By composting we return the nutrients and beneficial microorganisms to the ground, to start the growing process again. This is closed loop growing, thinking and designing. In order to live sustainably we need to start thinking and working in this manner.

*Check with your respective council to ensure you are disposing of your green waste responsibly.

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8. Appendices

Appendix 1 - Further Reading

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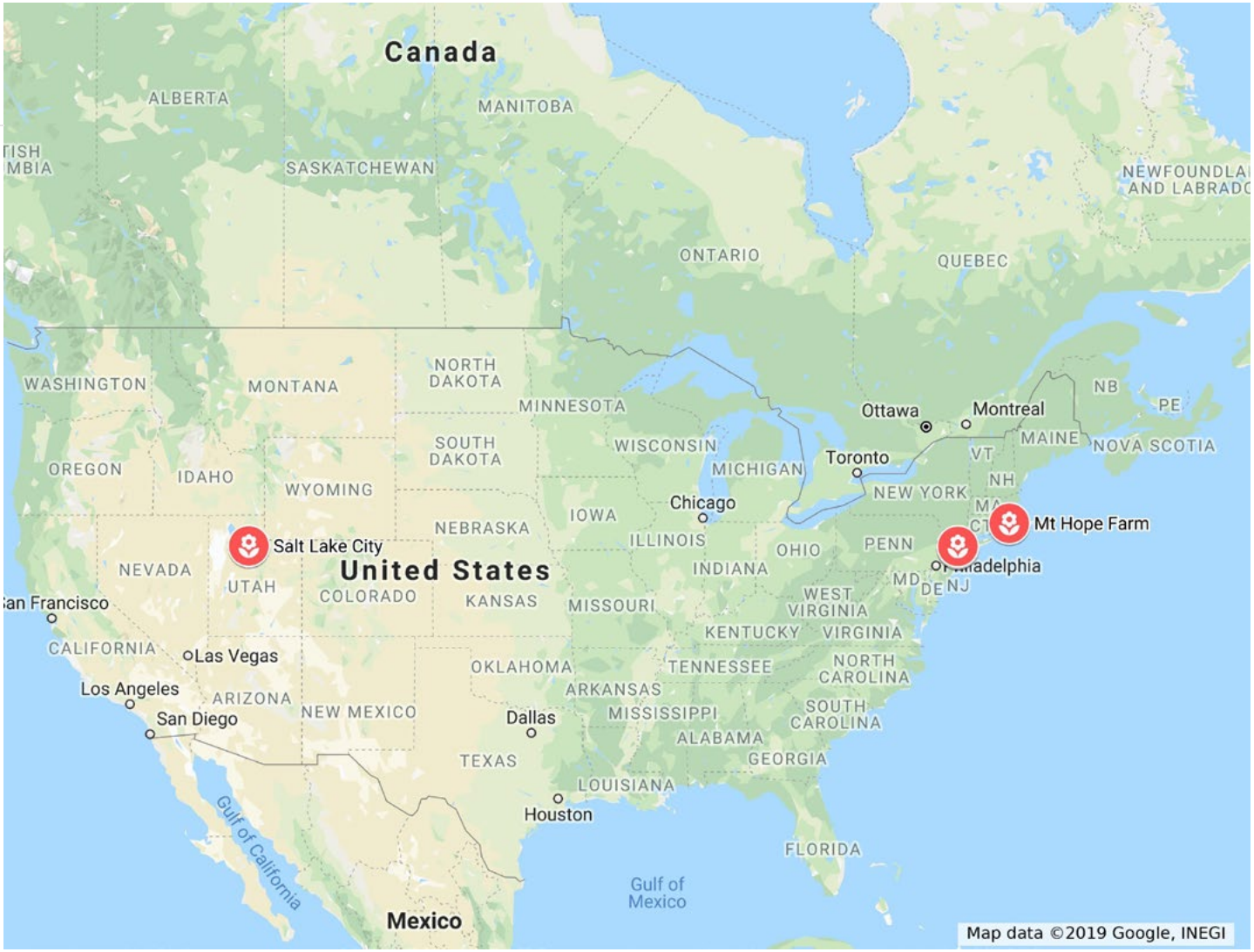
ISSI Fellowship USA 2019

Locations Fellow visited

All items

This map represents visitation sites

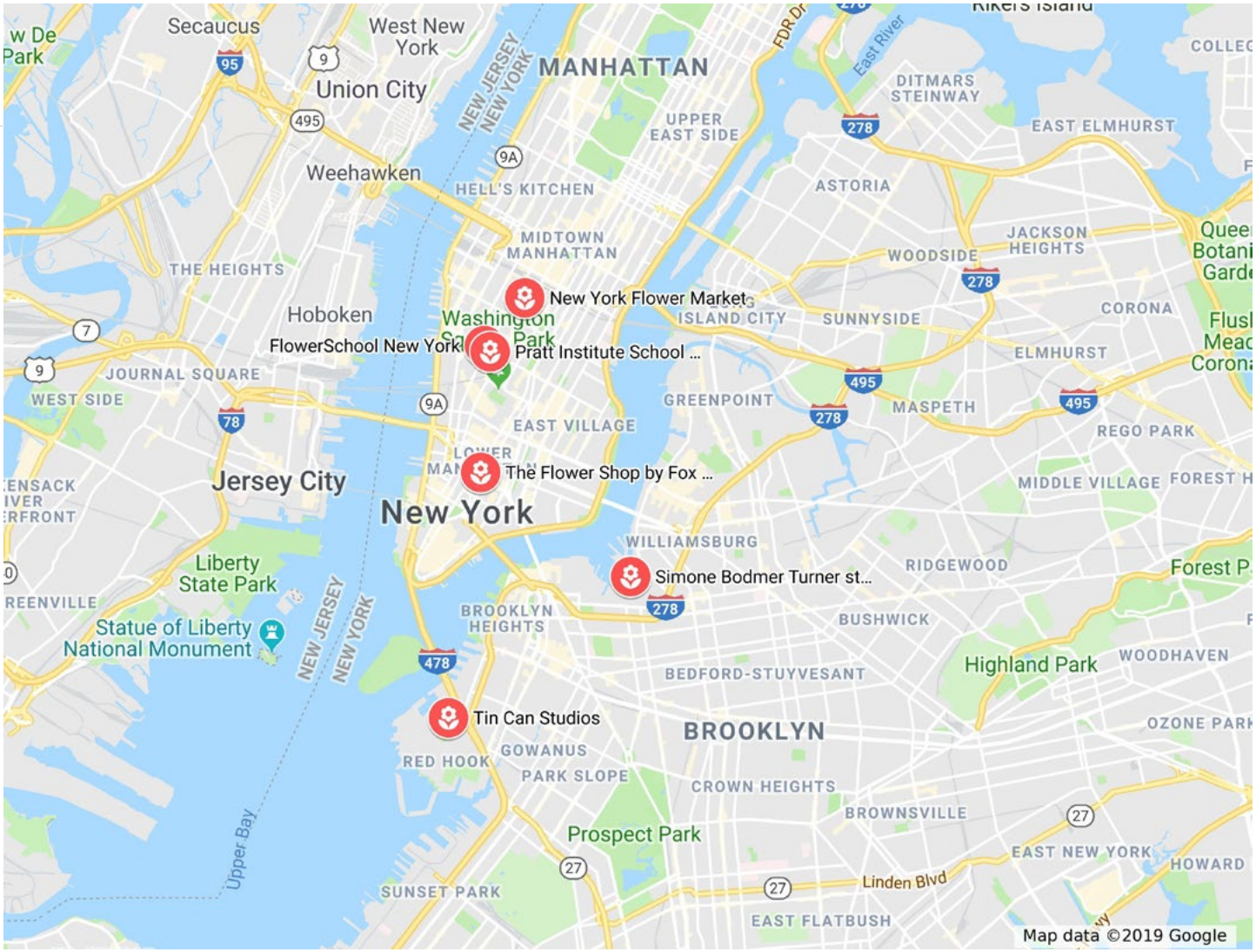


ISSI Fellowship USA 2019

Locations Fellow visited

All items

This map represents visitation sites



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