ROYAL HAWAiiAN
TRADiTiONAL HAWAiiAN CLOTHiNG FOR DUSK

by Ken Gilliland

Overview

Aloha. The island chain which now comprises the state of Hawaii was first settled by Polynesian explorers sometime between 800- 1000 AD. By the time the first Europeans made contact in the late 18th century, the native Hawaiians had established a rich and thriving culture which was strictly divided along caste lines. Social status was marked by what a person wore and this convention continued even after the arrival of Christian missionaries who forced their Western modes of dress on the native Hawaiians.

The pre-European dress included three distinct items; grass skirts, Kapa cloth garments and feathered attire.

Grass Skirts. Easily, the most identifiable symbol of Hawaii because of its association with traditional hula dancers, grass skirts were actually constructed from the outer bark and leaves of the banana tree. The skirt's waistband was tightly braided and fit the wearer snugly. Longer strands of fiber hung down from the waistband. Traditionally, the same fibrous material was fashioned into anklets and worn during ceremonial dances.

Kapa Cloth. This is also known as "bark cloth" by Westerners or "tapa" throughout the rest of the Pacific Rim. It was the material from which the most common articles of Hawaiian clothing were made. Traditionally manufactured by women, kapa cloth is made from the bark of the paper mulberry tree through a complex process which renders the bark into a pliable, felt-like fabric. Kapa cloth was often dyed or printed with bold, colorful patterns. The finished cloth was then fashioned into the "malo," the tucked skirt worn by men, or the "pa'u," the short skirt worn by women.

Feathered Attire. These items, worn by Hawaiian nobility and royalty, were constructed from a base of finely woven fiber netting and thousands of brightly colored feathers in a bold design. Lesser chiefs wore shorter feathered capes while kings and high-ranking officials wore longer cloaks. The feathered cloak of King Kamehameha was composed of approximately 450,000 feathers of the mamo bird. Each mamo bird only yielded about six or seven of the appropriate feathers. Thus the making of these Hawaiian garments led to the extinction of several species of birds

The Royal Hawaiian set has two versions of male traditional Polynesian clothing for both the Poser and DAZ Studio versions of Dusk. Included in both sets are a Feathered Cape and Crown, a Kapa loincloth, necklaces and leaf/fern anklets, wrist and head bands.

Poser Use

In the Poser version of Royal Hawaiian, you will find all the Clothing items and alternate materials in the "Figures library" under the " People / Dusk / Clothing" folders.   All forms of Poser files (.cr2, .pp2 and .mc6) are grouped into the Figures library for easier access.

What's included and where it can to found:

- Figures (.cr2) in the "Hawaiian Royals" folder
  - Dusk-Loin Cloth
  - Dusk-Hawaiian Crown
  - Dusk-Beaded Necklace
  - Dusk-Whale tooth Necklace
  - Dusk-Flower Lei
- Props (.pp2) in the "Hawaiian Royals" folder
  - Dusk-Hawaiian Dynamic Cape (Dynamic Cloth item—see Dynamic Cloth tutorial)
  - Dusk-Leaf Crown (Smart-prop)
  - Dusk-Ankleband_L & Dusk-Ankleband_R (Smart-prop)
  - Dusk-Wristband_L & Dusk-Wristband_R (Smart-prop)
- Materials (.mc6) in the "Hawaiian Royals" folder
  - Additional material settings for all clothing items.

Attaching Clothing Items

The process for attaching clothing items to a figure is easy in Poser. For Figure/Character files (.cr2) you will need to use the "Conform to" button found in the "Figure" drop-down list on the main Poser tool bar. You will "Conform" the clothing item to the "Dusk" figure. Fit morphs for the clothing items can be found in the BODY sections of the clothing item in the Parameters Tab. Loading clothing items before you load the figure may cause conforming issues. Delete the clothes to load the figure first.

With the Prop files (.pp2), you will need to select the base figure first, the Dusk model, then load the Clothing Prop files. Morphs, size and positioning adjustments for these items can be found by selecting the Clothing Prop and using the Parameters Tab.

Applying Materials to Clothing Items

To change the material on a clothing item, select it and go to the Materials Library. Apply the alternate material to the clothing item by clicking the library icon. **In the case of the transparent ribbing materials for the Hawaiian Crown, you will also have to turn the "CrestRibs" morph to "1" to successfully create the ribbed look.**

DAZ Studio Use

In the DAZ Studio version of Royal Hawaiian, you will find all the Clothing items and alternate materials in the Studio " People / Dusk / Clothing" folders.

What's included and where it can to found:

- Figures (.duf) in the "Hawaiian Royals" folder
    - Dusk-Loin Cloth
    - Dusk-Hawaiian Crown
    - Dusk-Hawaiian Cape (for use with Hivewire3D's "Everyday Poses" only)
    - Dusk-Flower Lei
    - Dusk-Beaded Necklace
    - Dusk-Whale tooth Necklace
    - Dusk-Leafy Ankleband-L & Leafy Ankleband-R
    - Dusk-Leafy Wristband-L & Leafy Wristband-R
    - Dusk-Leafy Crown
    - Dusk 'Ohi'a Lehua Crown
    - Dusk-Hawaiian Dynamic Cape (D-Force Cloth item—see D-Force Cloth tutorial)
- Materials (.dsa and .duf) in the "Materials" sub-folder
    - Additional material settings for all clothing items.

Attaching Clothing Items

The process for attaching clothing items to a figure is easy in DAZ Studio. Select the Dusk character and click the clothing item you wish the character to wear. DAZ Studio will automatically fit/conform the clothing item to the figure. If you accidently forgot to select the Dusk figure first, you can select the clothing item and in Parameters/Misc there is a "Fit to" button.

Most Dusk shapes are supported for the clothing items included in this package. Some additional "Fit" morphs can be found by selecting the clothing item and looking in the Parameters/Morphs section.

Applying Materials to Clothing Items

To change the material on a clothing item, select it and go to the Materials subfolder. Apply the alternate material to the clothing item by clicking the library icon. **In the case of the transparent ribbing materials for the Hawaiian Crown, you will also have to turn the "CrestRibs" morph to "1" to successfully create the ribbed look.**

Using the Poser Dynamic Cloth Cape

2. The Dynamic Cape is loaded onto the figure in the "T" Pose.

1. Go to the Figure Library and load the Dusk Character. Do not alter the figure from the "T" Pose.

2. With the Dusk Character selected, select and load the "Dusk-Hawaiian Cape". The cape smart props to the "chest" part of Dusk.

3. Move the Animation slider to Frame 30. (The Animation slider is beneath the Document Window. See the illustration to the left.) With Dusk still selected apply a pose or manually create a pose for Dusk. The cape will not follow the pose—that's okay.

Also, it is best not to have any items on the upper half of the body until after the Cloth draping has been completed as sometimes the cloth will cling to wrist bands or necklaces giving undesirable results.

4. Click the Cloth Tab to enter the Cloth Room.

5. Under "1. Cloth Simulation" click the "New Simulation" button. A "Simulation Settings" dialog box will appear. I suggest staying on the default 30 frames under "Simulation Range" for a test run. The more frames simulated, the more draping will occur.
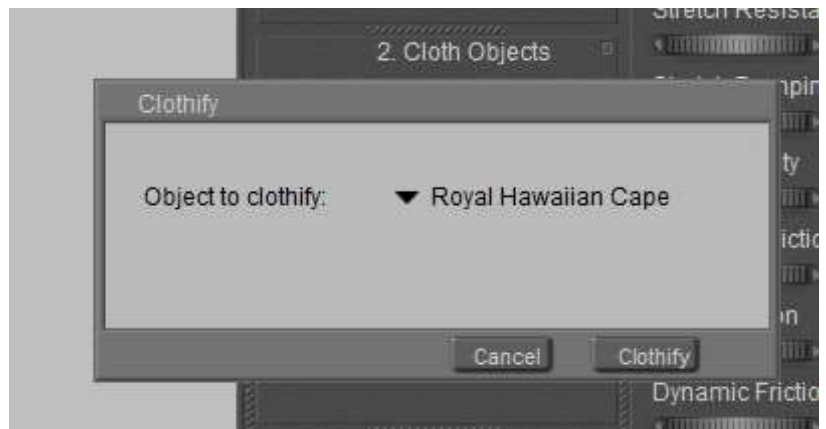
One more thing before closing this dialog box- under "Additional Cloth Collision Options" put a check mark in the box in front of "Cloth Self-

Collision".

Now Press OK to close the dialog box and create the simulation.

6. Under "2. Cloth Objects" (in Poser 7 this is "2. Cloth") click the "Clothify" button. Find and select the "Royal Hawaiian Cape" Then to close the dialog box press the "Clothify" button.

7. Still under "2. Cloth Objects" (in Poser 7 this is "2. Cloth") click the "Collide Against" button. In the "Cloth Collision Objects" dialog box click the "Add/Remove" button. In the "Select Objects" box put an "X" in front of "Dusk".

More advanced users may selectively choose which body parts you want the cape to drape on. Click "OK" to close the "Select Objects" box, and then click "OK" to close the "Cloth Collision Objects" dialog box.

8. The last step is to go to "4. Dynamic Controls" and click "Calculate the Simulation". It will run through the number of frames you chose and simulate draping.
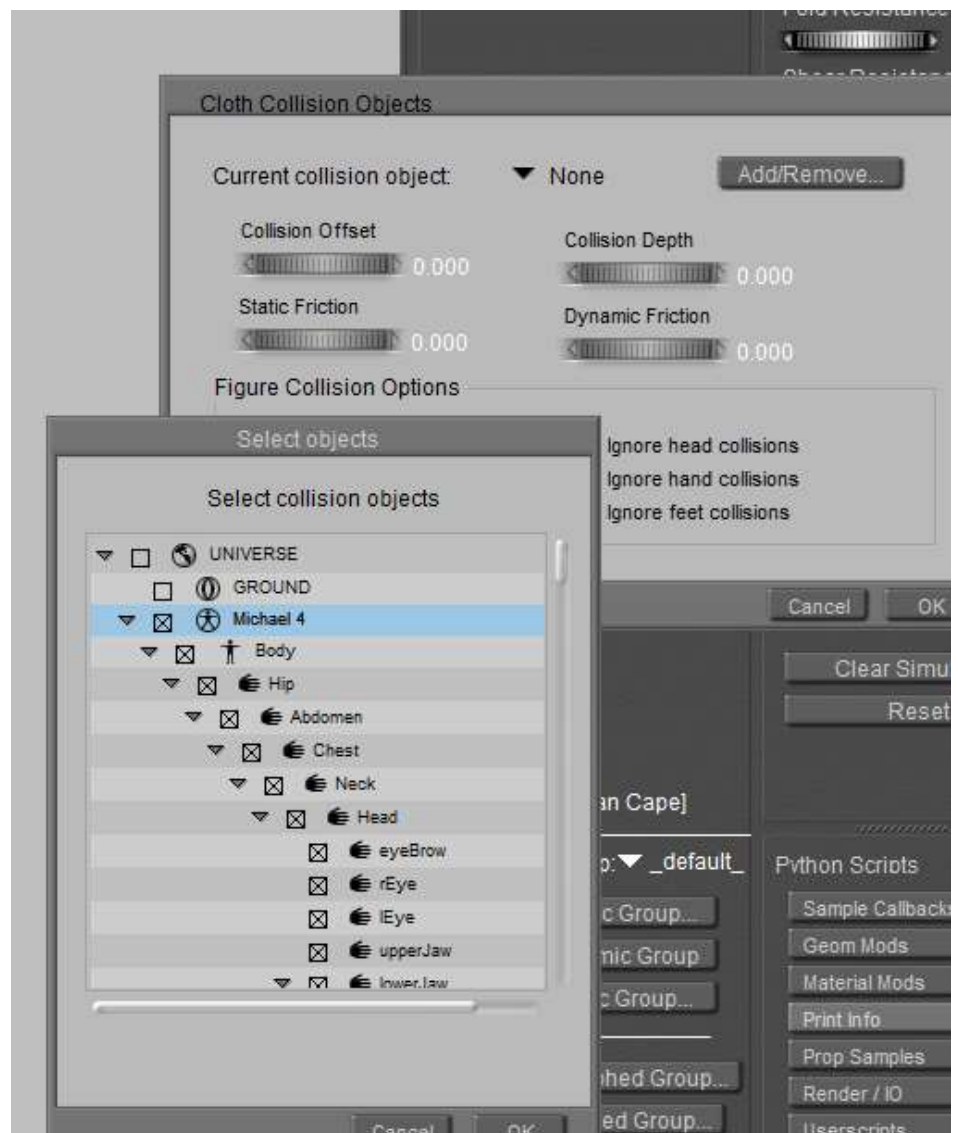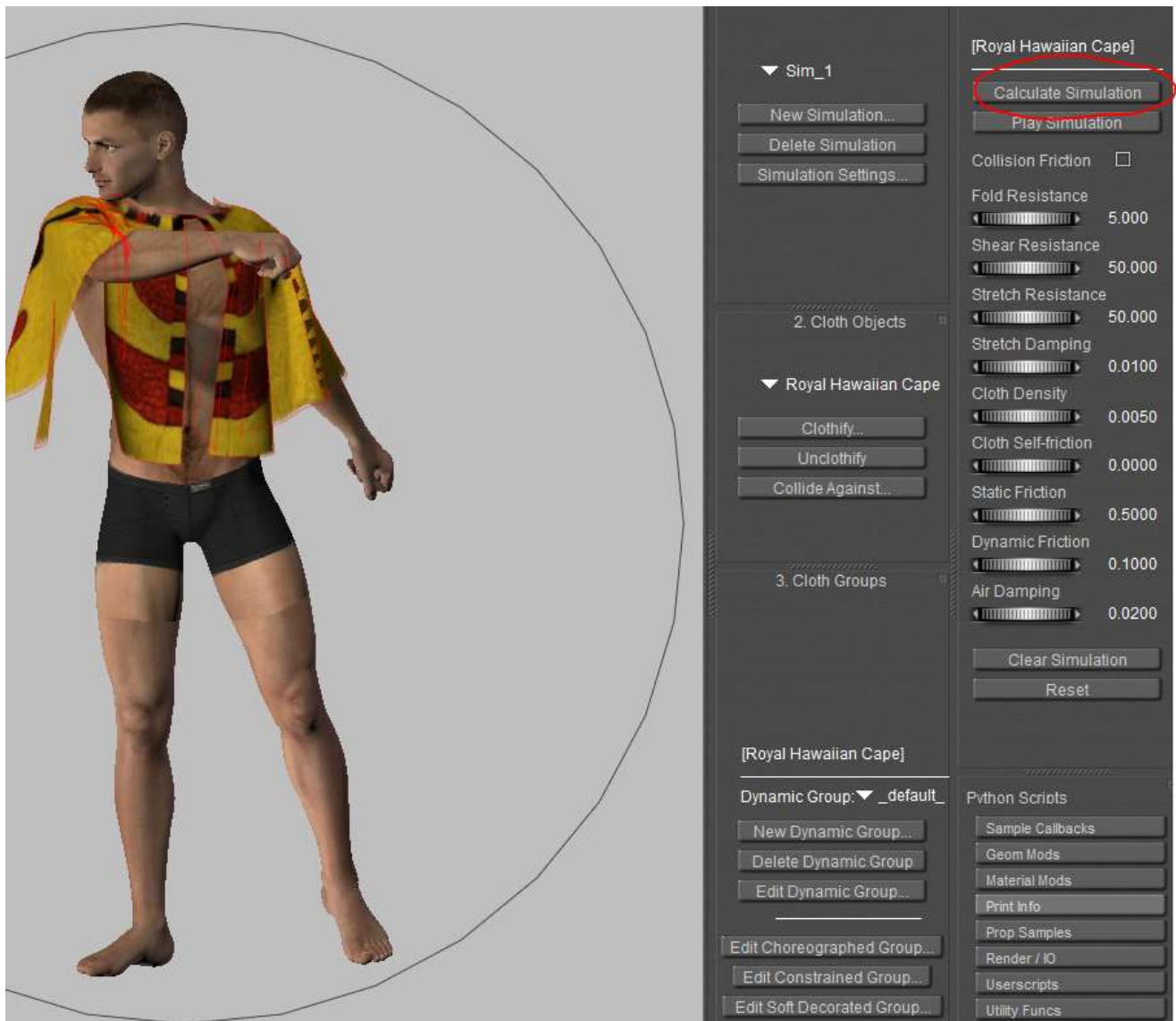
You'll notice that the

figure returns to the "T" pose, but over the 30 frames the cape will adhere to your selected "final" pose. It is important to start with the "T" pose so that the Clothifying process will understand where to place the cloth in a more naturally

draped way as it tracks the arm movements to your chosen pose.

If you are unhappy with the draping you can press the "Clear Simulation" button and adjust the frames or items like "Fold Resistance", "Cloth Density", etc. and calculate the simulation again. And if you chose to add more frames, for more draping calculations, remember to move your pose to the final frame.

9. Once you get the look you like, click the Pose Tab to close the Cloth Room.

 Now it is okay to accessorize the Dusk character with leaf wrist bands, necklaces and crowns.

Using the DAZ Studio D-Force Cloth Cape

The D-Force Cape is loaded onto the figure in the "T" Pose.

1. Go to the Figure Library and load the Dusk Character. Do not alter the figure from the "T" Pose.

2. With the Dusk Character selected, select and load the "Dusk-Hawaiian Cape". The cape smart props to the "chest" part of Dusk.

3. Depending on the character chosen (non default figure) you may need to adjust the main Y-trans and Z-scale on the cape. Make sure that the cape is above the shoulders and base of neck (Y-trans) and that the chest, belly and back don't poke through (using Z-scale)

4. Dial in or Apply the pose you want to Dusk.

5. Select the "Simulation Settings" tab. If you don't have it as one of your workplace tabs, you can select it by going to the toolbar, clicking the "Window" tab and selecting "Panes (Tabs)> Simulation Settings".
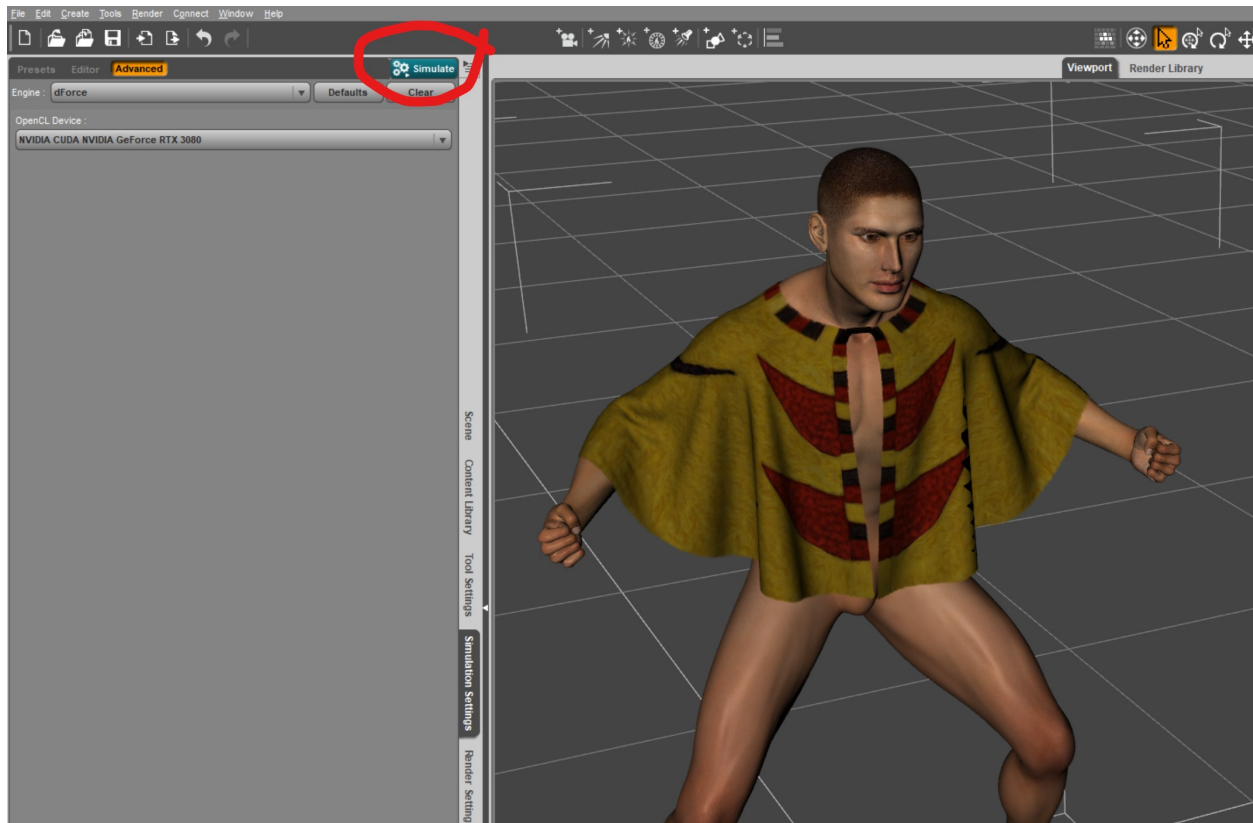
6. Now we'll get the cape to fit the pose. Simply press the "Simulate" button at the top of "Simulation Settings" pane.

The simulation will go through a series of iterations to successfully drape the cape. If you are unhappy with the draping, press the "clear" button and adjust the cape (y-trans and z-scale) or go into the "Editor" portion of the pane to adjust the D-force settings.

A PASSiON FOR BiRD FEATHERS

While Polynesians hunted some birds for food, their primary focus was actually collecting feathers to adorn the feathered Crowns and capes of the nobility and royal families. Polynesians would often construct snares to catch the birds, then pull out the required feathers and release the birds back into the wild. Whether the majority of birds actually survived this ordeal is debated, however it is clear that several bird species, such as the mamo, became extinct at least partially due to feather collection. The feathered cloak of King Kamehameha was composed of approximately 450,000 feathers of the mamo bird and each mamo only had 6-7 useable yellow feathers.

The feathers most commonly used in capes and crowns were red, from the 'i'iwi (Vestiaria coccinea) and apapane (Himatione sanguinea). and yellow, from the 'o'o (Moho nobilis) and mamo (Drepanis pacifica). Black feathers from the 'o'o were also used, and more rarely green from the 'o'u (*Psithacirostra psittacea*). The feathers from these birds were fairly small, and before they were attached to the netting-foundation, they were carefully picked over and arranged in bunches according to size. One bunch examined had as many as eighteen small red feathers. In making up the yellow feathers, some shorter red feathers were placed over their quills to form what was termed a pa'u (skirt). The quills of each bunch were tied together with a strip of olona

The Hawai'i Mamo (*Drepanis pacifica*) went extinct in 1899

bast, the inner bark or bast of the olona plant. Women were allowed to sort feather bunches but the making of the garments was restricted to men. With the lower part of the netting toward the worker, the feathers were tied to the netting in overlapping rows that commenced at the lower border. This commencement-method with the free or tip-ends of the feather-bunches directed toward the lower edge, left the meshes above or beyond clear for successive rows. The feather-bunches overlapped laterally and the rows were spaced close enough for the free ends to overlap the row below it and thus completely cover the surface of the netting-foundation. The result was a smooth surface that resembles velvet or plush.

THE SONG OF KALÂKAUA

KALÂKAUA A HE iNOA
KA PUA MAE`OLE i KA LA
EA EA EA EA

KALÂKAUA iS HiS NAME
A FLOWER THAT WiLTS NOT iN THE SUN
TRA LA LA LA

KE PUA MAiLA iKA MAUNA
KE KUAHiWi O MAUNAKEA
EA EA EA EA

BLOOMiNG ON THE SUMMiT
OF THE MOUNTAiN, MAUNA KEA
TRA LA LA LA

KE `A MAiLA i KiLAUEA
MALAMALAMA O WAHiNE KAPU
EA EA EA EA

BURNiNG THERE AT KiLAUEA
THE LiGHT OF THE SACRED WOMAN
TRA LA LA LA

A LUNA O UWE KAHUNA
KA PALi KAPU O KA`AU
EA EA EA EA

ABOVE UWE KAHUNA
THE SACRED CLiFF OF KA`AU
TRA LA LA LA

EA MAi KE ALi`i KiA MANU
UA WEHi i KA HULU O KA MAMO
EA EA EA EA

THE BiRD CATCHiNG CHiEF RiSES
ADORNED WiTH FEATHERS OF THE MAMO BiRD
TRA LA LA LA

KALÂKAUA A HE iNOA
KA PUA MAE`OLE i KA LA
EA EA EA EA

KALÂKAUA iS HiS NAME
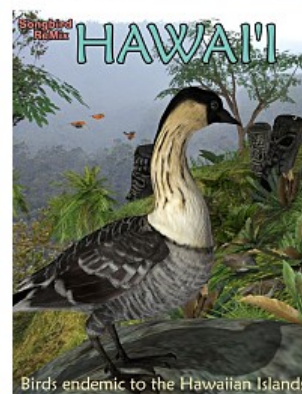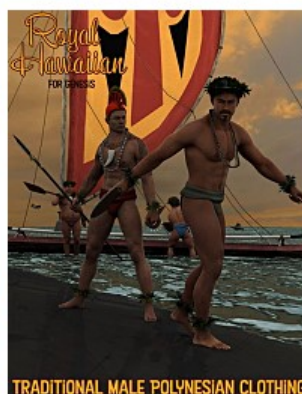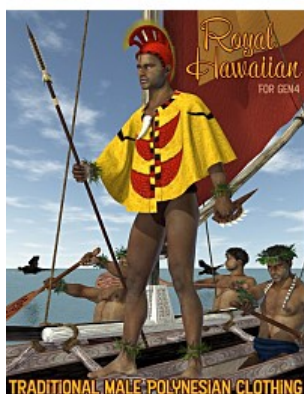A FLOWER THAT WiLTS NOT iN THE SUN
TRA LA LA LA

SPECIAL THANKS TO MY BETA TEAM

2015 Release: FlintHawk and Jan (with special assistance from Nerd3D)
2023 Re-release: Alisa and FlintHawk

Hawaiian themed sets available through Renderosity