

A tale of two Sheridans

by David Black

The M551 Sheridan was a light tank developed in the 1960s and named after General Philip Sheridan, who became famous during the American Civil War. It was designed to be air-dropped by parachute and to swim across rivers. It was armed with the troublesome M81/M81E1 152mm gun/launcher, which fired conventional ammunition and the MGM-51 Shillelagh guided anti-tank missile.

The Sheridan entered service with the U.S. Army in 1967 and was rushed into combat in Vietnam during January 1969. In April and August 1969, M551s were deployed to units in Europe and Korea. It saw extensive combat in Vietnam and limited service with the 82nd Airborne in Panama during Operation Just Cause and in the first Gulf War. The Sheridan was retired without replacement.



Vietnam was the first "television war." The medium was in its infancy during the Korean conflict, its audience and technology still too limited to play a major role.

References

To get a better understanding of all of the modifications during production, I suggest that the following references be consulted.

Sheridan: A History of the American Light Tank
by R.P. Hunnicutt, Random House Publishing Group, 1995

M551 Sheridan
by David Doyle, Squadron Signal Publications, 2008

M551 Sheridan: US Airmobile Tanks 1941-2001
by Steve Zaloga, Osprey New Vanguard, Osprey Pub Co., 2009

Sheridan Walkaround photo CD by Chris "Toadman" Hughes

Articles/reviews of the Academy and Tamiya models found on the internet.

For further research, I made a trip to the U.S. Army's Armor and Cavalry Museum restoration facility at Ft. Benning, Georgia to take tons of photographs of their two Sheridans.

The kits I used are the Tamiya M551 and the Academy M551 Vietnam Version.

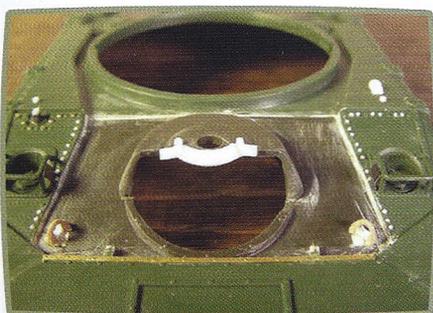
I also used the Eduard photo-etched brass set for the Academy M551 and the Friulmodellismo track set for the Sheridan. My build depicts a M551A1 Sheridan from the mid-1970s.

I researched the two kits and found that neither was a good representation of the Sheridan, with glaring inaccuracies in both. So I decided to combine the kits in an attempt to get a closer representation.



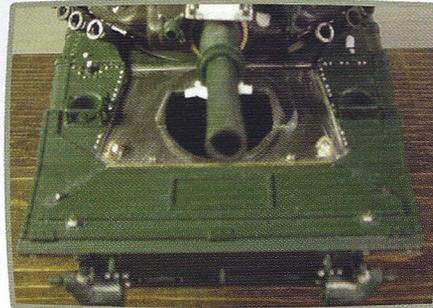
I was told that the best way to build a Sheridan with these two kits was to use the Academy hull and the Tamiya turret. This is partially true. As you will see, there are still a lot of corrections needed to both of these.

The Academy hull is better than the Tamiya hull, so I decided to work with it. The first thing that needed to be corrected was the fact that the driver's hatch on the Academy model is out of proportion. So I removed it and replaced it with the Tamiya driver's hatch, which is more to scale. It required that I cut out both hatches and put the Tamiya one in the Academy upper hull.



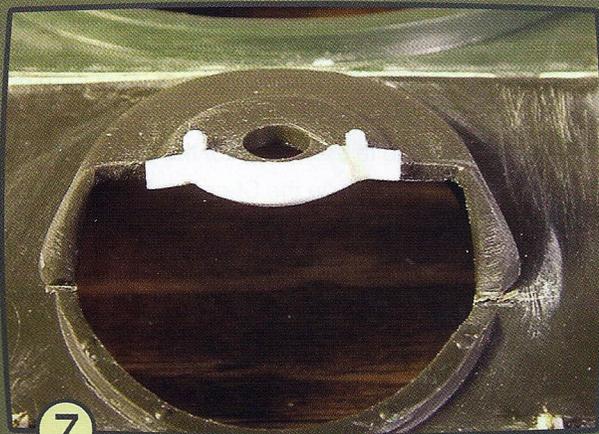
Other changes to the front upper hull were:

- 1 Replaced the lifting eyes with modified ones from an Academy M113A1 (spare parts box). Pieces of plastic stock were added to the bottom of the eyes to simulate the thicker base seen on the Sheridan lifting eyes.



- 2 Added a correct representation of the crew heater exhaust behind the right headlight. This was made from plastic strip and plastic tube.
- 3 Added the front bilge pump cover behind the left headlight. I made it by sanding down a piece of plastic stock.
- 4 Added more rivets around the glacis since the actual vehicle has tons, about two-thirds more than the model provides.
- 5 Shaped the swim vane latches to better represent the type on the real vehicles and add the wing nut hold-downs.
- 6 Added a piano hinge to the top of the swim vane to match the actual vehicle. This came from a photo-etched brass set for a half-track that I had in the spare parts box.





7 Added the correctly shaped bullet deflector detail to the top of the driver's hatch. This was fabricated from triangular stock that I heated and formed into the correct shape. I had to sand down the hatch cover so the deflector would fit correctly.

8 On the right side of the hull, I moved the fire extinguisher pull handle to the correct location and filled in the open seam where the two side plates met.

On the rear, I made the following changes:

1 Removed the two rear bilge pump outlets and replaced them with new ones that are closer to the correct size and shape for the A1 version.

2 Removed and replaced the rear lifting eyes (same technique as the front ones).

3 Replaced the swim shroud tie-downs with the ones from the Eduard set. I also added the two side tie-downs that are on the actual vehicle. These came from spare photo-etched brass parts.

4 I thinned down the external phone cover around the right tail light. It is recessed on the actual vehicle but short of cutting out a hole this seemed like the best choice.

5 Thinned the cover around the left tail light.

6 Added bolt heads and lift handle in the proper locations.

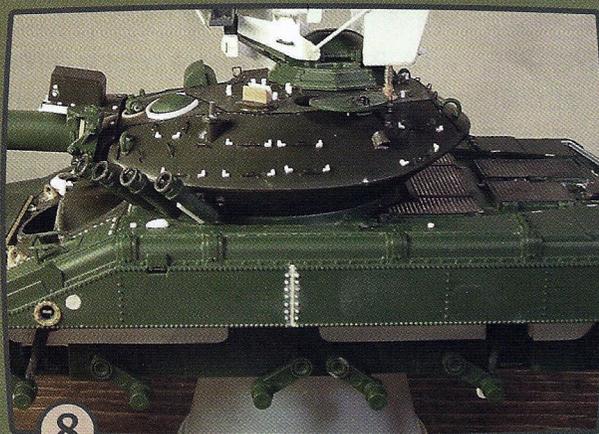
7 Added L-shaped brackets on both sides as seen on the real vehicle.

8 On the left side I filled in the seam between the two panels.



On the engine deck, I did the following:

1 The two rear engine access doors are touching on the Academy model but there should be space between them. In that space should be lifting handles and the latching system. I sanded down this area and added the handles and locking device. Grill covers from the Eduard set were added to the appropriate areas.



② The gas filler caps are molded backwards, so I cut them off and replaced them with two from the spare parts box.

③ Added the Eduard exhaust cover.

Rivets were removed from the entire upper hull where they don't exist on the real vehicle. Four bolt heads were added in the proper locations.

On the lower front hull, I modified the idler wheel arms to better represent the correct shape and mounting on the real vehicle. This was done by sanding to the correct shape and adding bolt heads. I then added Squadron white putty and sanded them to the proper shape.

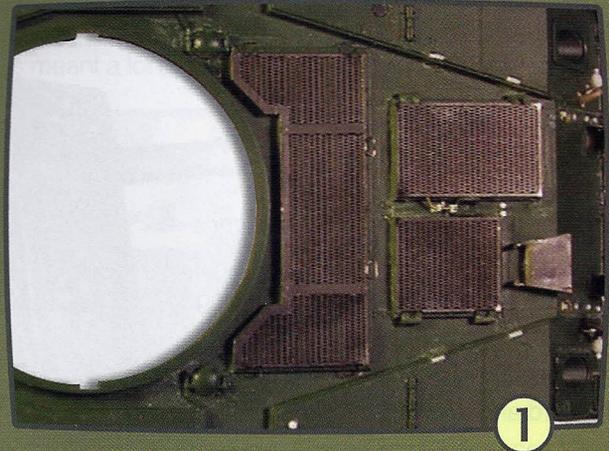
The idler wheel tension adjuster is located in the wrong place. I changed its location and fabricated mounting points on the hull and idler arm.

On the lower hull sides, I added covers to the side cutouts in the hull. These are on the real vehicle but were omitted from the model. I also added the side add-on anti-mine blast armor that appears on the A1 version. This was done with sheet stock and several cuss words.

The rear tow pintle mount was incorrectly shaped, so I scratchbuilt a correct one.

Inside the driver's hatch, I added periscopes and the washer fluid reservoir. The periscopes were from the spare parts box and the reservoir was fashioned from a piece of scrap sprue.

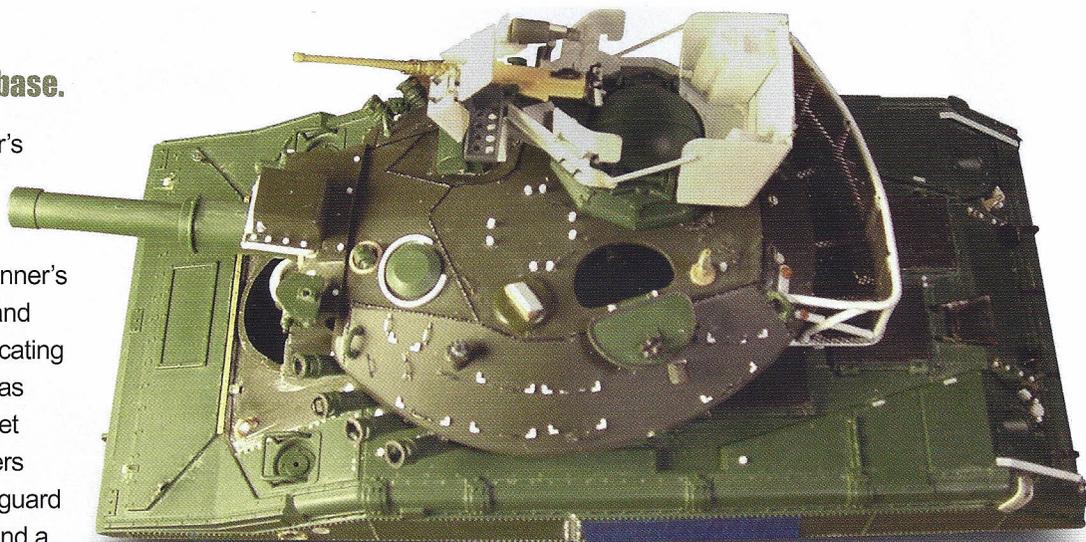
I rebuilt the shock absorbers for the front and rear road wheels. The ones with the Academy kit are designed wrongly, so I had to correct them to the proper two-tube design instead of the four-tube design. The mounting plate was also wrong and lacked details, so again I fixed those.



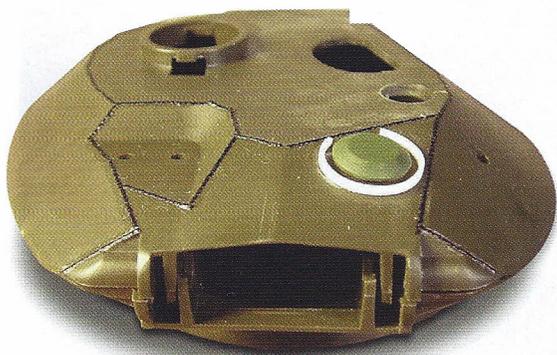
I used the Tamiya turret as my base.

You can see the turret and the gunner's hatch marked to be removed so that it can be displayed open.

On the Tamiya turret, I opened the gunner's hatch and removed the radio mount and gunner's periscope and filled in the locating holes for the bustle rack. Once that was done, I added the crew ventilator, bullet splash guard and Archer Fine Transfers resin weld seams. I made the splash guard from plastic stock that I wrapped around a wooden dowel and heated with a hairdryer. The vent is from the Academy model.



On the turret, I had to redo several of the Archer Fine Transfers weld seams. It is a good product but hard to work with on curved areas. I had to cut the seams into several short pieces to get them to curve but they kept popping off.

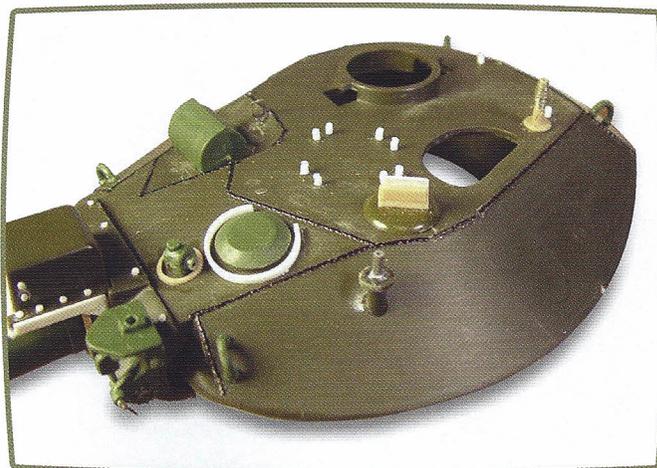


Next the gun shield, main gun and missile control box.

For the gun shield, I used the Tamiya part as it is a better representation of the actual one. It does have an extra opening above the co-axial machine gun that has to be filled and sanded. Since I was using the Academy main gun, I had to modify the attachment point in the shield. I did this using card stock and a gear from the parts box. I sanded down the gear and drilled it out.

The missile control box is from the Tamiya model but I added detail to better represent the actual box.

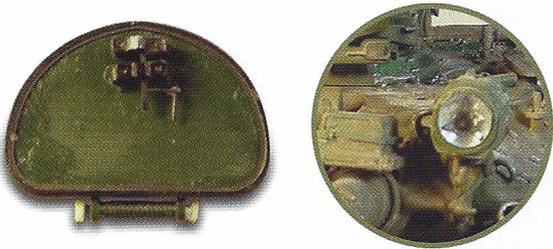
The main gun is from the Academy kit and the only modification was to add a small ring on the inside of the muzzle to give it a more realistic diameter and look.



I added detail to the gun shield such as the searchlight mount and the cover for the gun sight.

On the top of the turret, I added the power supply outlet for the searchlight, antenna mounts, lifting hooks and bolt detail. The ring around the power supply outlet is from the spare parts box. It was a crew vent off an old Italeri M113 that I sanded down. The antenna mounts are from the Tamiya kit and the spare parts box. Also added was the gunner's night vision periscope housing from the Academy kit.

I started working on the loader's hatch by adding the Eduard latch and gasket. Also added are hinges made from plastic half-round rod.



The searchlight was upgraded using the Eduard photo-etched brass parts. The interior of the light housing is a piece of holographic paper from the local party shop. This was cut and fitted inside after painting the inside silver just in case the paper didn't completely cover the entire interior.

I then worked on the commander's hatch and attached crow's nest armor.

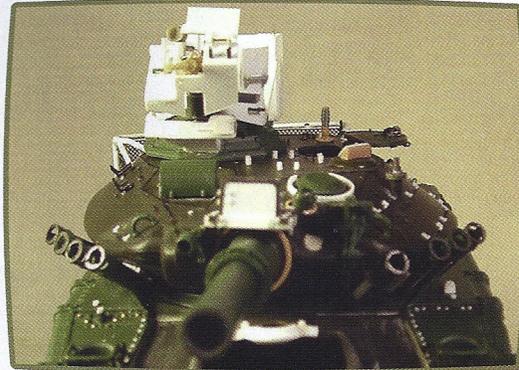
The first thing I did was fabricate a bottom piece for the Academy commander's cupola so that it will fit the Tamiya turret.

After that was finished and installed, I scratch built the AN/VVG-1 laser rangefinder that began to be installed on Sheridans in 1972. The Academy Gulf War version has this, but the Vietnam version that I had did not.

Next I started scratchbuilding the crow's nest armor that is also called the 'bird cage' by many crews. I decided to scratchbuild this because the kit's provided set is full of ejector pin marks and is molded too thickly. It is also shaped wrongly in several places. I started with the back portion because it also incorporated the housing for the electronics to the AN/VVG-1 laser rangefinder. These can be seen on the inside of the armor.

Next was to build the front armor shield for the .50 caliber M2. I added a night scope.

Since neither the Tamiya or Academy kits has the correct front shield (Academy has the rounded shield which was used in Vietnam), it had to be completely scratchbuilt from pictures. This meant a lot of guessing, cutting, cussing and dry fitting.

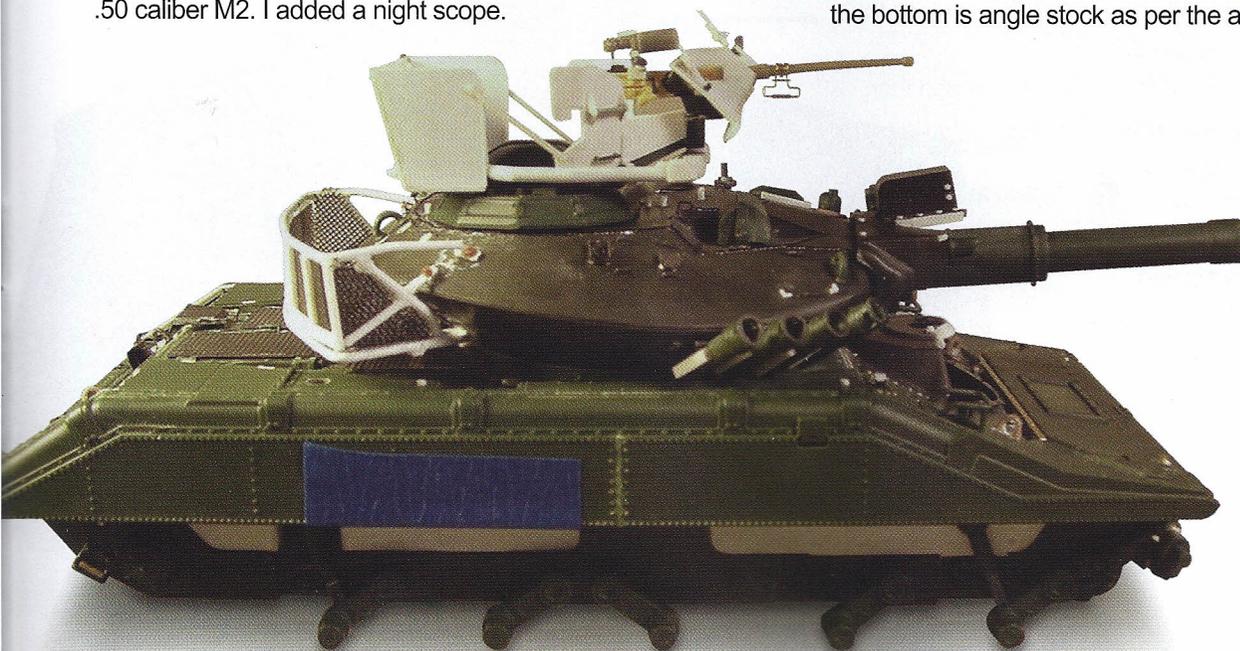


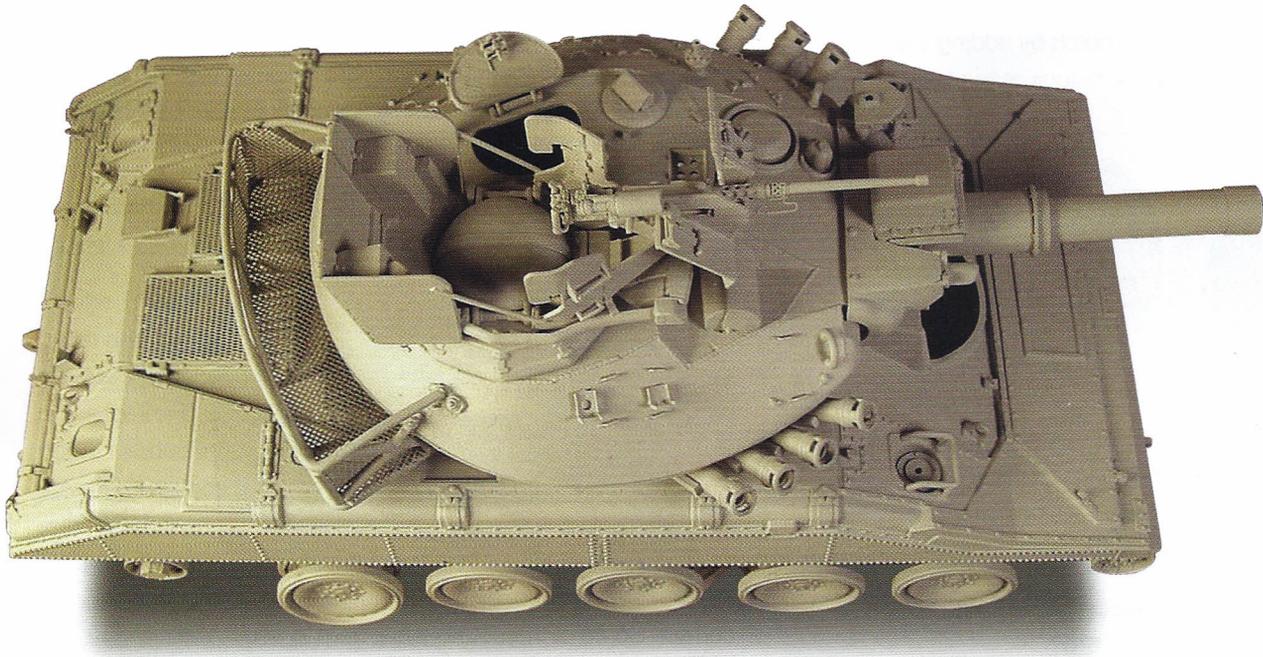
I think it turned out okay but I'm not totally sure it is 100% correct. Some of the details were hard to see in the references and pictures.

For anyone building this kit and using the Eduard photo-etched brass set, BEWARE! The Eduard instructions tell you to trim off the boxes on the outside of the grenade launchers. I did this only to find out that they should not have been trimmed off, so I had to add them back. Once I did that and mounted them to the turret sides, I added the accompanying conduit for the wiring and then moved on to the ammo can holders and tie-downs.

The holders are cut from styrene angle rod and the tie-downs are from the Eduard set. On the right side of the turret, I added the .50 caliber MG storage mounts. These were used when the Sheridan was air-dropped.

The real turret basket is made out of tubing so I started with plastic rod. Once that was done, I added the metal mesh (plastic mesh that comes with the Academy kit), which I cut to size and glued between the rods. The support rib on the bottom is angle stock as per the actual vehicle.





Painting – MERDC Winter color scheme

The primer coat pointed out some areas that needed a little more attention before painting. I did the MERDC Winter color scheme on my Sheridan. I also painted and attached most of the stowage. I used Model Master Acryl colors that matched the corresponding FS colors for the MERDC paint scheme.

MM Dark Green	4726	FS 34079
MM Olive Drab	4728	FS 34087
MM Armor Sand	4711	FS 32077
MM Flat Black	4788	FS 37038

For weathering, I started with an overall light black wash followed by a wash using the AK Interactive Filter for NATO Tanks. Following this, I lightly drybrushed with Model Master Acryl Olive Drab #4728. Once all of this had dried, I mixed MIG Productions' Light Dust, European Dust and Concrete pigments and applied this over the model and then set it with MIG Productions' Thinner for Washes. Once this dried, I did a little touch-up and mixed some of the remaining pigment mix with Liquitex Resin Sand Texture Gel. This was applied to lower areas of the model and followed by adding a mixture of MIG Light Dust and Concrete pigments.

The area around the gas filler caps was treated with AK Interactive's Fuel Stains and a little pigments mix. Roadwheels and shock absorbers were done with AK Interactive's Oil and Grease Stain and pigments.

Highlights on the vehicle were done with a soft silver artists' pencil from the local art supply store.

I think it is important to sit the model aside for a few days and then look at it again to see if there is anything I want to change. If not, I will add a final flat coat to seal everything.

One thing I did do to the final model was remove the AN/PRC 77 radio hanging on the commander's bird cage. I thought it just looked better without it.



Next I built the figures and the base for this project.

The figures are from the parts box with heads, arms, etc. added to achieve the desired poses. All figures are painted with Vallejo acrylic paints.



The base is a plaque from the local craft shop that I stained and varnished. Pink insulation foam was used as the ground base and covered with Aves ClayShay. I like this product because it does not shrink when drying like Celluclay.

The ground cover and plants are dirt and plants from the woods behind my house along with some static grass and silver birch seeds (from Hudson & Allen).

This is the finished diorama for this project.

