*Pinus mugo* (for most other pine species, the male cones are more likely on the lower branches and female cones on the upper branches to help ensure cross pollination).
Young female cone: megasporophylls (ovule, integuments and micropyle), cone axis
Young female cone: megasporophyll (ovule, integument and micropyle), ovuliferous scale tip, sterile bract, cone axis. The megasporocyte has undergone meiosis in the dark area of the ovule and the surviving megaspore is dividing by mitosis to become the female gametophyte and is surrounded by the nucellus.
Young male cone (pine spp.1): microsporocytes (2n) within a microsporangium on a male cone scale (microsporophyll). Microsporocytes undergo meiosis to result in four genetically unique haploid (1n) cells called microspores that develop into pollen grains.
Mature male cones: microsporophylls with microsporangia containing pollen grains.

Gymnosperm Life Cycle

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Pine pollen grains: wings (air sacs), generative cell, tube cell
Germinated pine pollen grains (mature male gametophyte). The generative cell will enter the pollen tube and divide by mitosis to form the sterile cell and a spermatogenous cell.
Older female cone scale l.s.: cone axis, nucellus, integument, micropyle [Note the scales are spread apart to allow pollen to enter. Pollen tubes can be seen growing through the nucellus. The developing female gametophyte is using the nucellus as an energy source for its growth.]
Fertilization: In the pollen tube, the spermatogenous cell has divided by mitosis to form two sperm nuclei. Archegonia (only 2 of 6 visible in thin section) have formed as part of the mature female gametophyte tissue. On the right (arrow), one sperm nucleus has fertilized the egg cell in the archegonium to form a zygote (2n). The other sperm nuclei will disintegrate - single fertilization (unlike Angiosperms).
The suspensors were lost in this thin section but the embryos can be seen on this proembryo whole mount:

Proembryo: the zygote develops into a proembryo with suspensors with embryos at the tips
Seed (l.s.): the embryo (3 of 8 cotyledons visible) has digested part of the female gametophyte tissue that surrounds it (the seed coat was lost in the slide preparation).

Gymnosperm Life Cycle
Seed: the female cone matures and after about two years the seeds are released in the fall. The wing is a membrane from the cone scale (unlike in samaras where it’s pericarp tissue).
Seedlings: seed coat, 8 cotyledons, hypocotyl, radicle

Gymnosperm Life Cycle