

Avian Specialist in a Fully-Equipped Mobile Veterinary Clinic

Alan M. Fudge

Abstract

Short presentation on the operation of a full-service mobile avian specialty and exotic clinic, after doing the same for 24 years in a fixed location facility. Technological advances assist in providing such services. While the predominant patient in this practice are pet birds, the author also treats pet reptiles, small mammals and fish. In the U.S., two companies make “purpose-built” mobile veterinary clinics:

La Boit <http://www.laboit.com/veterinary/index.php> and
Dodgen Industries <http://www.dodgenmobiletech.com/products.php?id=17/>

When the shopping center, where the author’s clinic was located, was sold to the adjacent Honda dealer, future planning was necessary. Facing substantial new leasehold improvement costs elsewhere, the author opted for a mobile clinic and chose the 24 foot La Boit unit, manufactured in the Columbus, Ohio area. Acquisition costs, including taxes and vehicle licensing fees, were approximately U.S. \$100,000, not including a refurbished Abaxis Vetscan chemistry analyzer and a new digitally-controlled, high frequency compact xray system (MinXray /3M Asymetrix cassette system/Fisher Autobox automatic processor, located at base - about \$26,000 additional for the lot). Digital radiography was not in the budget for 2004 and on board x-ray processor systems available had the disadvantage of requiring draining for every trip and ongoing vapour/odor problems.

Apparently, in 2006, the vendors have some better onboard processor solutions. Within a reasonable time interval, digital-based radiographic imaging should become practical to the typical veterinary practice. Otherwise, existing clinic equipment was incorporated into the rig. The clinic sports a seven kilowatt generator, necessary when using air-conditioning or heating, radiography, or when extended remote usage is in service. Under “normal” conditions, a pair of 6 volt golf cart “house batteries” in series, power a voltage inverter for lighting, computers, “whole house fan” laser printer, refrigerator/freezer, centrifuges, microscope and routine services. The house batteries are good for several hours and are also replenished a bit when the vehicle is on the road again. Otherwise, the rig is fitted with a 30-ampere house voltage landline when at base. The batteries also recharge slowly when the generator is running.

The rig has a built in-vacuum cleaning system, requiring power from the generator or the landline. The cab includes a built-in backup video camera, a satellite broadcast radio, a trucker’s cellular antenna, a Garmin Street Pilot GPS, and a 2 meter VHF truck antenna. The latter antenna allows the author, a member of the county foothill/mountain search and rescue (of lost/injured persons) to keep in radio contact with the county law enforcement commanders and ham radio operators. In the U.S., a number of veterinary practices provide home visit services from a regular passenger car or sports utility vehicle, albeit providing a more limited in the scope of veterinary services. In California, even those vehicles have to be registered with the veterinary licensing

board. The author wanted to communicate to clients that the practice clinical capabilities would not be diminished with the new mobile service, which commenced April 21, 2004.

This mobile clinic is licensed to the same standards as a fixed location California veterinary clinic, with separate surgery room. Unlike most states, California requires that radiographic procedures are not performed in the surgical suite. The author went to full electronic medical records in January 2001, using the same proprietary software system (DVMax, Sneakers Software; <http://www.dvmax.com>) since 1992. This previous decision proved prescient when the mobile service was ultimately decided upon. In some cases, receipt or transmission of client records (say to/from the university) is facilitated by simply emailing a text file. All client education handouts also are on the hard drive (two Apple laptops) and are printed to an onboard laser printer, as needed. A wall-mounted flat-panel monitor is remotely cabled to the main computer for client education presentations.

When at the base, a WiFi connection allows connection to the network server for client data updates and a high speed internet connection. While on the road, the author is fortunate to be provided with a high-speed wireless internet connection allowing reception and transmission of client faxes and email. Business telephones are conventional land lines, which are forwarded to cellular telephones/voicemail during business hours. Financial transactions are greatly aided by the use of a wireless credit card terminal, which accepts major credit/debit/ATM cards. Using cellular telephone technology, this unit costs about US \$ 1000, plus monthly fees. As a specialty practice, the client service area is larger than the typical neighborhood dog and cat practice. This means that the author's mobile service area is also larger.

The large, V-10 Ford engine powertrain, is very much a gasoline drinker. Hence, zones are based on time and mileage, have been set up. Fixed location appointments are also scheduled 2-3 times/week, in order to service out of area clients and those who decline to pay for the additional travel charges. The travel charges really just defray the direct vehicle costs and do not adequately compensate the professional for travel time. Dog/cat practices, utilizing this sort of vehicle, tend to gravitate toward smaller and smaller service areas and to higher overall time and mileage efficiency. This service is best suited for urban/suburban areas, but is impacted by parking problems in central city areas, due to the vehicle length (24 feet/7.3 meters). It is not possible nor practical to provide emergency services from a mobile veterinary clinic. This unit is not an ambulance, nor can the author reasonably rush from one end of the district to the other. Every effort is made to accommodate the urgent needs of regular clients, however. Evening and weekend services are not provided, with recorded referral to the university (UC Davis) for critical care.

Rapid urgent, laboratory services can be provided at curbside (Abaxis Vetscan/Olympus microscope). The Abaxis can run off of battery power or house voltage. This is supplemented by the author's national service laboratory (Hitachi analyzer; microbiology, informatics etc.), located at the base. Radiographs are typically exposed while the patient is under isoflurane, using the MinXray HF100, powered by the generator. Films are processed at the base. Minor surgical procedures are performed at curbside, while major cases are performed at the base. Service fees in U.S. dollars: fixed location (client has appointment to bring pet to a location where mobile clinic is parked): exam \$55.00; curbside visit, travel time and exam: \$99.00-139.00, depending on zone. Additional patient exams: \$55.00. A baby bottle warmer, plugged into the cigarette lighter port of vehicle, provides a convenient and rapid method to warm parenteral fluids. Compact tube and hematocrit centrifuges, running off of DC or AC house voltage are available for this application. Slide staining systems are compartmentalized into sealed plastic units, and stowed. Hot water is provided via the house voltage-powered water heater. Adequate freshwater and waste water storage

exists onboard for at least two weeks. A heated perch (Jorvet.com) has provided novel help in some cases. A mini-fish diagnostic lab is carried, along with assorted aviary and fish nets. A digital scale, weighing patients up to 5 kg, is onboard. A mechanical package scale, weighing patients up to 50 pounds (22.7 kg), is also carried. Diets (primarily HBD and Oxbow) are carried aboard or are shipped by ground freight service to the client. A complete avian/exotic pharmacy is on board, in addition to a lean inventory of avian/exotic reference monographs, supplemented by an excessive inventory of same at the base.

Fortunately, with the wireless internet connection, the author is connected usually to the Veterinary Information Network and other internet resources, providing instant further information for the client. Followup medications are mailed to the client or phoned into a human pharmacy. The surgical suite includes an isoflurane vaporizer/flowmeter, with two E-series oxygen tanks, serving a non-rebreathing circuit, which is usable in the surgical or exam/treatment areas. A Storz video endoscopic system is on-board, along with with an Ellman Surgitron (RF surgery), a Vetronics respirator, a Vetronics cardiac monitor, a Parks Medical doppler, a Medical Engineering respiratory monitor and a Nellcor pulse oximeter(mammals). A house-current powered surgical warmer is used. Surgical packs are autoclaved at the base. Adequate inventory is onboard for an excessive number of surgical or radiographic procedures.







